

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

```
Run on:      October 17, 2002, 10:27:54 ; Search time 6.17941 Seconds
              (without alignments)
              1739.205 Million cell updates/sec
```

Title: US-09-049-696-5  
Perfect score: 393  
Sequence: 1 CTATAGTTGAATTCTGTACA.....GACCAATCTGGAAGCATGGC 220

Scoring table:		BLOSUM62
Xgapop	10.0	Xgapext 0.5
Ygapop	10.0	Ygapext 0.5
Fgapop	6.0	Fgapext 7.0
Delop	6.0	Delext 7.0

```
Searched:      231628 seqs, 24425594 residues
Total number of hits satisfying chosen parameters: 463256
```

```

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries

```

```

Command line parameters:
-MODEL=frimet+np.model -DEV=xlh
-O=cgrr2 /USPFO.spool/US09049696/runat.16102002.115821.247339/app.query.fasta_1.13694
-DB=issued/USPFO.AA -OFMT=fastaan -SUFFIX=rai -MINMATCH=0.1 -IOPCJ=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MAPFIX=close62 -TRANS=human40 cd1
-LIST=45 -DOCALL=200 -THR_SCORE=PCT -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=plc -NORM=ext -HEAPSIZE=500 -MINKEN=0 -MALKEN=2000000000
-USER=US09049696 -CGCJ=1.157 -ETURNat.16102002.115821.24739 -NCP=6 -ICPJ=3
-NO_XLPHY -NO_MMAP -LARGEUSER -NEG_SCORES=0 -WAIT -LONGLOG -DEV.TIMEOUT=120
-WARN.TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FCGAPOP=6 -FCGAPEXT=7
-XGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

```

```
Issued_patents_AA:*
1: /cgn2_6/prodata/2/1aa/5a_COMB pep:*
2: /cgn2_6/prodata/2/1aa/5b_COMB pep:*
3: /cgn2_6/prodata/2/1aa/6a_COMB pep:*
4: /cgn2_6/prodata/2/1aa/6b_COMB pep:*
5: /cgn2_6/prodata/2/1aa/POTUS_COMB pep:*
6: /cgn2_6/prodata/2/1aa/backfiles1 pep:*
```

**Pred. No.** is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	386	98.1	914	4	US-09-193-562D-28	Sequence 28, Appl
2	252	94.2	902	4	US-09-193-562D-34	Sequence 34, Appl
3	249.5	63.5	1000	4	US-09-193-562D-13	Sequence 30, Appl
4	249	63.4	342	4	US-09-193-562D-30	Sequence 13, Appl
5	249	63.4	795	4	US-09-193-562D-11	Sequence 11, Appl
6	249	63.4	821	4	US-09-193-562D-12	Sequence 12, Appl
7	249	63.4	905	4	US-09-193-562D-2	Sequence 2, Appl
8	248	63.0	903	4	US-09-193-562D-46	Sequence 46, Appl
9	232	59.0	943	4	US-09-193-562D-32	Sequence 32, Appl
10	71.5	18.2	3079	5	PCT-US94-00198-4	Sequence 4, Appl
11	64	16.3	579	4	US-09-173-151A-2	Sequence 2, Appl
12	64	16.3	686	4	US-09-173-151A-4	Sequence 4, Appl

13	63	16.0	357	1	US-08-145-006C-12	Sequence 12, Appl
14	63	16.0	357	5	PCT-US94-00545-12	Sequence 12, Appl
15	62	15.6	1872	6	5386025-6	Patent No. 5386025
16	62	15.6	1873	1	US-08-4335-672B-A	Sequence 7, Appl
17	62	15.6	1873	1	US-08-3336-257A-7	Sequence 4, Appl
18	62	15.6	2161	1	US-07-7445-206A-2	Sequence 2, Appl
19	62	15.6	2161	1	US-08-4455-543A-19	Sequence 49, Appl
20	62	15.6	2161	1	US-08-4455-543A-51	Sequence 51, Appl
21	62	15.6	2161	2	US-08-223-305C-49	Sequence 49, Appl
22	62	15.6	2161	2	US-08-223-305C-51	Sequence 51, Appl
23	62	15.6	2161	2	US-08-311-363-2	Sequence 2, Appl
24	61	15.5	639	5	PCT-US94-07297-39	Sequence 39, Appl
25	61	15.5	921	1	US-08-396-479B-2	Sequence 2, Appl
26	61	15.5	921	1	US-08-818-82-82	Sequence 2, Appl
27	60.5	15.4	1082	1	US-08-106-499A-2	Sequence 2, Appl
28	60.5	15.4	1082	1	US-08-429-264-2	Sequence 2, Appl
29	60.5	15.4	1139	1	US-08-832-883-2	Sequence 2, Appl
30	60.5	15.4	1139	2	US-08-832-877-2	Sequence 2, Appl
31	60.5	15.2	1213	2	US-08-937-102-2	Sequence 2, Appl
32	60.5	15.2	3898	2	US-08-876-991-2	Sequence 2, Appl
33	60.5	15.2	3898	2	US-09-059-853-2	Sequence 2, Appl
34	60	15.1	1968	1	US-07-745-206A-7	Sequence 7, Appl
35	60	15.1	1968	1	US-08-4455-543A-45	Sequence 45, Appl
36	60	15.1	1968	2	US-08-223-305C-45	Sequence 45, Appl
37	59	15.1	1968	2	US-08-311-363-7	Sequence 7, Appl
38	59	15.1	1968	3	US-08-975-703-6	Sequence 6, Appl
39	59	15.0	897	4	US-09-515-884-6	Sequence 6, Appl
40	58.5	14.9	97	4	US-09-019-095A-18	Sequence 18, Appl
41	58.5	14.9	508	4	US-09-019-095A-8	Sequence 8, Appl
42	58.5	14.9	521	4	US-09-019-095A-2	Sequence 22, Appl
43	58.5	14.9	526	4	US-09-019-095A-2	Sequence 2, Appl
44	58	14.8	830	1	US-08-145-006C-5	Sequence 5, Appl
45	58	14.8	830	5	PCT-US94-00545-5	Sequence 5, Appl

## ALIGNMENTS

```

RESULT 1
US-09-193-562D-28
: Sequence 28, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedict U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617 0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 28
: LENGTH: 914
: TYPE: PRT
: ORGANISM: Homo sapiens
: US-09-193-562D-28

```

Alignment Scores:		
Pred. No.:	2.63e-43	914
Score:	386.00	Matches: 72
Percent Similarity:	100.00%	Conservative: 0
Best local Similarity:	100.00%	Mismatches: 0
Query Match:	98.22%	Indels: 0
DB:	4	Gaps: 0

05-09-049-6965 (1-220) x US-09-193-5620-28 (1-914)

QY 3 ATAGTTGAATTTCTGTACAGAAACAAACACACAAAGAGCTTCAAACCAAGCAAAATCAA 62

Db 246 TTevalGluPhncYsThhGluGlnAsnHtAsnLysGlnAlaProAsnLysGlnInsIn 265

QY 63 AAATGCAAATCTCCGAAGACACATGGGAAGTATCCGGATTCTGAGACATTTAAGAAAAC 122

```

Db 266 LysCysAsnLeuArgSerThrTrpGluValIleArgAspSerGluAspPheLysLysThr 285
QY 123 ACTCCTATGACAAACAGCCACCAATCCACCTTCATGCTGAGATGGACAAAGA 182
Db 286 ThrProMetThrTrpGlnProProAsnProThrPheSerLeuGlnIleGlyGlnArg 305
QY 183 ATTGTGTGTTACTCCTGACAAATCTGGAAGCATG 218
Db 306 IleValCysLeuValLeuAspLysSerGlySerMet 317

RESULT 2
US-09-193-562D-34
; Sequence 34, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 34
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.: 2,05e-25 Length: 902
Score: 252.00 Matches: 48
Percent Similarity: 75.68% Conservative: 8
Best Local Similarity: 64.86% Mismatches: 16
Query Match: 64.12% Indels: 2
Db: 4 Gaps: 1

US-09-049-696-5 (1-220) x US-09-193-562D-34 (1-902)

QY 3 ATAGTGAATTTGTGACGAACAACCAACAAAGAGCTCCAAACAGCAAAATCA 62
Db 246 ValValGluPheCysThrGluAsnHisAsnAlaGluAlaProAsnLeuGlnAsnLys 265
QY 63 AAATGCAATCTCCGAGACATGGAGTGCATCGTATTCGTAGAGACTTTAAGAAAAC 122
Db 266 MetCysAsnArgSerThrTrpAspValIleMetSerGlnAspPheGlnAsnAla 285
QY 123 ACTCCTATG-----ACACAGCAGCCACCAATCCACCTTCATTCATTCGTCAGATTGGA 176
Db 286 ProProMetArgGlyThrGluAlaProProProThrProThrPheThrLeuLeuLysSerArg 305

QY 177 CAAGAATGTGTGTAGTCCCTGACAAATCTGGAAGCATG 218
Db 306 ArgArgValValCysLeuValLeuAspLysSerGlySerMet 319

RESULT 3
US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 30
; LENGTH: 1000
; TYPE: PRT

```

```

; ORGANISM: Homo sapiens
US-09-193-562D-30

Alignment Scores:
Pred. No.: 4,54e-25 Length: 1000
Score: 249.50 Matches: 48
Percent Similarity: 76.71% Conservative: 8
Best Local Similarity: 65.75% Mismatches: 16
Query Match: 63.49% Indels: 1
Db: 4 Gaps: 1

US-09-049-696-5 (1-220) x US-09-193-562D-30 (1-1000)

QY 3 ATAGTGAATTTGTGACGAACAACCAACAAAGAGCTCCAAACAGCAAAATCA 62
Db 246 ValThrGluPheCysThrGluLysThrHisAsnLysGluAlaProAsnLeuThrAsnLys 265
QY 63 AAATGCAATCTCCGAGACATGGAGTGCATCGTATTCGTAGAGACTTTAAGAAAAC 122
Db 266 MetCysAsnHisArgSerThrTrpAspValIleMetSerGlnAspPheGlnHisLeu 285
QY 123 ACTCCTATGACA---ACACAGCAGCCACCAATCCACCTTCATTCATTCGTCAGATTGACAA 179
Db 286 SerProMetThrGluIleAsnLeuProArgProThrPheSerLeuLeuLysSerLysGln 305

QY 180 AGAATGTGTGTGTAGTCCCTGACAAATCTGGAAGCATG 218
Db 306 ArgValValCysLeuValLeuAspLysSerGlySerMet 318

RESULT 4
US-09-193-562D-13
; Sequence 13, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 13
; LENGTH: 342
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-13

Alignment Scores:
Pred. No.: 3,99e-25 Length: 342
Score: 249.00 Matches: 47
Percent Similarity: 78.38% Conservative: 11
Best Local Similarity: 63.51% Mismatches: 14
Query Match: 63.36% Indels: 2
Db: 4 Gaps: 1

US-09-049-696-5 (1-220) x US-09-193-562D-13 (1-342)

QY 3 ATAGTGAATTTGTGACGAACAACCAACAAAGAGCTCCAAACAGCAAAATCA 62
Db 247 ValThrGluPheCysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLys 266
QY 63 AAATGCAATCTCCGAGACATGGAGTGCATCGTATTCGTAGAGACTTTAAGAAAAC 122
Db 267 MetCysAsnGlyLysSerThrTrpAspValIleMetAsnSerValAspPheGlnAsnThr 286
QY 123 ACTCCTATGACA-----ACACAGCAGCCACCAATCCACCTTCATTCATTCGTCAGATTGGA 176
Db 287 SerProMetThrGluMetAsnProProThrProThrPheSerLeuLeuLysSerLys 306

```



```

Oy      177 CAAGAATGTGTTAGCCCTGCACAATCGAAGACG 218
        |||||||:|||||||:|||||||:|||||||:|||||||
Db      307 GlnrYgValVAlcysLeuValIleuAspLysSerMet 320

RESULT 5
US-09-193-562D-11
Sequence 11, Application US/09193562D
Patent No. 6309857
GENERAL INFORMATION:
APPLICANT: Pauli, Benedict U.
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
FILE REFERENCE: 18617.0052
CURRENT APPLICATION NUMBER: US/09/193,562D
PRIOR FILING DATE: 1998-11-17
PRIORITY FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 11
LENGTH: 795
TYPE: PRT
ORGANISM: Unknown
FEATURE:
OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

Alignment Scores:
Pred. No.: 4,98e-25 Length: 795
Score: 249.00 Matches: 47
Percent Similarity: 78.38% Conservative: 11
Best local Similarity: 63.51% Mismatches: 14
Query Match: * 63.36% Indels: 2
DB: 4 Gaps: 1

US-09-049-696-5 (1-220) x US-09-193-562D-11 (1-795)
Oy      3 ATACTGATTCGTGTACAGAACAAAACCACCAAAAGAACTCCAAACGAATAATCAA 623
        ::::|:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db      247 ValthrGluPhelystrGluUylstrHrHisasnThrGluAlaProasnLeuGlnasLys 260
Oy      63 AAATGCAATCTCCGAGCAGCATGGAGAGTGCCTGATTCTGTGAGACTTAAGAAAAACC 122
        |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db      267 MetCysasnGlySerThrTrpAspValIleMetAsnSerValAspPheGlnAsnThr 288
Oy      123 ACTGCTATGACACAC-----ACAGAGCCACCAAAATCCACCTTGATGTCGACGATTGGA 177
        ::|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
        287 SerProMethThrGluMelAsnProProThrHisProThrPheSerLeuLeuLysSerMet 307
        |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
        177 CAAAGAAATGTGTGTTAGCTCCTTGACCAAAATCTGGAACATG 218
        |||||||:|||||||:|||||||:|||||||:|||||||
Db      307 GlnrYgValVAlcysLeuValIleuAspLysSerMet 320

RESULT 6
US-09-193-562D-12
Sequence 12, Application US/09193562D
Patent No. 6309857
GENERAL INFORMATION:
APPLICANT: Pauli, Benedict U.
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
FILE REFERENCE: 18617.0052
CURRENT APPLICATION NUMBER: US/09/193,562D
PRIOR FILING DATE: 1998-11-17
PRIORITY FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 12
LENGTH: 821
TYPE: PRT
ORGANISM: Unknown
FEATURE:
OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-12
```

Alignment Scores:		5.03e-25	length:	821
Pred. No.:	249.00	Matches:	47	
Score:	78.38%	Conservative:	11	
Percent Similarity:	63.51%	Mismatches:	14	
Best Local Similarity:	63.36%	Indels:	2	
Query Match:	4	Gaps:	1	
US-09-049-696-5 (1-220) x US-09-193-562D-12 (1-821)				
OY	3	ATAGTTGAATTCGTGTACAGAACAAACCACAAAGAAGCTCCAAACGAAATTCAA	62	
	:::			
Db	247	ValTrGluPheCysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLys	266	
OY	63	AAATGCCATCTCCGAGACACATGGGAAGTGTCCGTATTCGTGAGACTTAAAGAAACC	1222	
		:::		
Db	267	MetCysAsnGlyLysSerThrTyrPaspAlaIleMetAsnSerValAspPheGlnAsnThr	286	
OY	123	ACTCCTATGACA-----ACACACCCACCAAAATCCCACTTCATTCGTGCAGATTGGA	1767	
	:::		:::	
Db	287	SerProMetThrGluMetAsnProProThrHisProThrPheSerLeuLeuLysSerLys	306	
OY	177	CAAGAATTCGTGTGTATAGTCCTTGACCAATCTGGAACATG	218	
		:::		
Db	307	GlnArgValValCysLeuValLeuAspLysSerLysSerLys	320	
RESULT 7				
US-09-193-562D-2				
Sequence 2, Application US/09193562D				
Patent No. 6309857				
GENERAL INFORMATION:				
APPLICANT: Pauli, Benedicth U.				
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium				
TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules				
FILE REFERENCE: 18617.0052				
CURRENT APPLICATION NUMBER: US/09/193,562D				
CURRENT FILING DATE: 1998-11-17				
PRIOR APPLICATION NUMBER: US/60/065,922				
PRIOR FILING DATE: 1997-11-17				
NUMBER OF SEQ ID NOS: 47				
SEQ ID NO 2				
LENGTH: 905				
TYPE: PRT				
ORGANISM: Unknown				
FEATURE:				
OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells				
US-09-193-562D-2				
Alignment Scores:				
Pred. No.:	5.16e-25	length:	905	
Score:	249.00	Matches:	47	
Percent Similarity:	78.38%	Conservative:	11	
Best Local Similarity:	63.51%	Mismatches:	14	
Query Match:	63.36%	Indels:	2	
Db:	4	Gaps:	1	
US-09-049-696-5 (1-220) x US-09-193-562D-2 (1-905)				
OY	3	ATAGTTGAATTCGTGTACAGAACAAACCACAAAGAAGCTCCAAACGAAATTCAA	62	
	:::			
Db	247	ValTrGluPheCysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLys	266	
OY	63	AAATGCCATCTCCGAGACACATGGGAAGTGTCCGTATTCGTGAGACTTAAAGAAACC	1222	
		:::		
Db	267	MetCysAsnGlyLysSerThrTyrPaspAlaIleMetAsnSerValAspPheGlnAsnThr	286	
OY	123	ACTCCTATGACA-----ACACACCCACCAAAATCCCACTTCATTCGTGCAGATTGGA	1767	
	:::		:::	
Db	287	SerProMetThrGluMetAsnProProThrHisProThrPheSerLeuLeuLysSerLys	306	
OY	177	CAAGAATTCGTGTGTATAGTCCTTGACCAATCTGGAACATG	218	
		:::		

Db 307 GlnArgValValCysLeuValLeuAspLysSerGlySerMet 320

## RESULT 8

US-09-193-562D-46  
Sequence 46, Application US/09193562D  
Patent No. 6309857

## GENERAL INFORMATION:

APPLICANT: Pauli, Benedicht U.

TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
Activated Chloride Channel-Adhesion Molecules

FILE REFERENCE: 18617.0052

CURRENT APPLICATION NUMBER: US/09/193,562D

PRIOR FILING DATE: 1998-11-17

NUMBER OF SEQ ID NOS: 47

SEQ ID NO 46

LENGTH: 903

TYPE: PRT

ORGANISM: Unknown

OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal  
epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-  
US-09-193-562D-46

## Alignment Scores:

Pred. No.:	7.01e-25	Length:	903
Score:	248.00	Matches:	47
Percent Similarity:	77.03%	Conservative:	10
Best Local Similarity:	63.51%	Mismatches:	15
Query Match:	63.10%	Indels:	2
DB:	4	Gaps:	1

US-09-049-696-5 (1-220) x US-09-193-562D-46 (1-903)

QY 3 ATAGTTGAATTCGTACAGACAAACAAAGAGCTCCAAACAGCAAAATCA 62

Db 246 ValThrGluPheCysThrGluLysThrHisAsnValGluAlaProAsnLeuGlnAsnLys 265

QY 63 AAATGCAATTCGCCAGACATGGAGAGTGCATGCTGATTCGTGAGACTTTAAGAAAAC 122

Db 266 MetCysAsnGlyLysSerThrTrpAspValIleMetAsnSerThrAspPheGlnAsnThr 285

QY 123 ACTCTATGACA-----ACACAGCCACCAAAATCCACCTTCTATTCGTGAGATTGGA 176

Db 286 SerProMetThrGluMetAsnProProThrGlnProThrPheSerLeuLysSerLys 305

QY 177 CAAGAAATGTGTGTTAGTCTTGACAAATCTGGAAGCATG 218

Db 306 GlnArgValValCysLeuValLeuAspLysSerGlySerMet 319

## RESULT 9

US-09-193-562D-32

Sequence 32, Application US/09193562D

Patent No. 6309857

GENERAL INFORMATION:

APPLICANT: Pauli, Benedicht U.

TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
Activated Chloride Channel-Adhesion Molecules

FILE REFERENCE: 18617.0052

CURRENT APPLICATION NUMBER: US/09/193,562D

PRIOR FILING DATE: 1998-11-17

NUMBER OF SEQ ID NOS: 47

SEQ ID NO 32

LENGTH: 943

TYPE: PRT

ORGANISM: Homo sapiens

US-09-193-562D-32

Alignment Scores:

Pred. No.:	9.7e-23	Length:	943
Score:	232.00	Matches:	44
Percent Similarity:	70.27%	Conservative:	8
Best Local Similarity:	59.46%	Mismatches:	20
Query Match:	59.03%	Indels:	2
DB:	4	Gaps:	1

US-09-049-696-5 (1-220) x US-09-193-562D-32 (1-943)

QY 3 ATAGTTGAATTCGTACAGACAAACAAAGAGCTCCAAACAGCAAAATCA 62

Db 249 ValValGluPheCysAsnAlaSerThrHisAsnGlnGluAlaProAsnLeuGlnAsnGln 268

QY 63 AAATGCAATTCGCCAGACATGGAGAGTGCATGCTGATTCGTGAGACTTTAAGAAAAC 122

Db 269 MetCysSerLeuArgSerAlaTrpAspValIleThrAspSerAlaAspPheHisSer 288

QY 123 ACTCTATG-----ACACAGCCACCAAAATCCACCTTCTATTCGTGAGATTGGA 176

Db 289 PheProMetAsnGlyThrGluLeuProProProThrPheSerLeuValGlnAlaGly 308

QY 177 CAAGAAATGTGTGTTAGTCTTGACAAATCTGGAAGCATG 218

Db 309 AspLysValValCysLeuValLeuAspLysSerGlySerMet 322

## RESULT 10

PCT-US94-00198-4

Sequence 4, Application PC/TUS9400198

GENERAL INFORMATION:

APPLICANT: Schering Corp.

TITLE OF INVENTION: RAS Associated GAP Proteins

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESSEE: Schering Corp.

STREET: 1 Giralda Farms

CITY: Madison

STATE: New Jersey

COUNTRY: USA

ZIP: 94304-1104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: Macintosh

OPERATING SYSTEM: 6.0.8

SOFTWARE: Microsoft Word 5.1a

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/00198

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/004,824

FILING DATE: 15-JAN-1993

ATTORNEY/AGENT INFORMATION:

NAME: Lunn, Paul G.

REGISTRATION NUMBER: 32,743

REFERENCE/DOCKET NUMBER: DX0352 PCT

TELECOMMUNICATION INFORMATION:

TELEPHONE: (201)822-7255

TELEFAX: (201)822-7039

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 3079 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

ORIGINAL SOURCE:

ORGANISM: Saccharomyces cerevisiae

PCT-US94-00198-4

## Alignment Scores:

Pred. No.:	0.357	Length:	3079
Score:	71.50	Matches:	21
Percent Similarity:	48.28%	Conservative:	7

Best Local Similarity: 36.21% Mismatches: 21  
Query Match: 18.19% Indels: 9  
DB: 5 Gaps: 3  
US-09-049-696-5 (1-220) x PCT-US94-00198-4 (1-3079)  
QY 25 AAACACACAAAGAAAGCTCCAAACAGCAAAATGCAATCTCCGAGACAT 84  
Db 190 Lysheasnfhrarghrleuglnlle-----leuglnsmnlellesehrhlsvalhls 207  
QY 85 GGAAGAGATCCGATTCGAGACTTTAAGAAACCACTCTATGACACAGCCAC 144  
Db 208 Glysnn-----lleuThrhrleuSerSerleuProArgHlsYsser 224  
QY 145 CAATGCCA-----CCTTCATTCGACGATTCGACAAAGATTG 186  
Db 225 TyrleuThrhrghlsasnhlsProSerHlsCyslysmetleaspSerhrleu 242  
RESULT 11  
Sequence 2, Application US/09173151A  
Patent No. 6326472  
GENERAL INFORMATION:  
APPLICANT: Timans, Jacqueline C.  
APPLICANT: Debets, Johannes Eduard Maria  
APPLICANT: Antonius  
APPLICANT: Sana, Theodore R.  
APPLICANT: Bazan, J. Fernando  
APPLICANT: Kastelein, Robert A.  
TITLE OF INVENTION: Human Receptor Proteins; Related Reagents and Methods  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: DNAX Research Institute  
STREET: 901 California Avenue  
CITY: Palo Alto  
STATE: California  
COUNTRY: USA  
ZIP: 94304-1104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/173,151A  
FILING DATE: 14-OCT-1998  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/065,776  
FILING DATE: 17-NOV-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/078,008  
FILING DATE: 12-MAR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/081,883  
FILING DATE: 15-APR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/095,987  
FILING DATE: 10-AUG-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/078,416  
FILING DATE: 18-MAR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/062,066  
FILING DATE: 15-OCT-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Ching, Edwin P.  
REGISTRATION NUMBER: 34,090  
REFERENCE/DOCKET NUMBER: DX0767X  
TELEPHONE: (650)852-9196  
TELEFAX: (650)496-1200  
INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:  
LENGTH: 579 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-173-151A-2  
Alignment Scores:  
Pred. No.: 2,31  
Score: 64.00  
Percent Similarity: 51.028  
Best Local Similarity: 26.538  
Query Match: 16.288  
DB: 4 Gaps: 1  
US-09-049-696-5 (1-220) x US-09-173-151A-2 (1-579)  
QY 57 AATCAAAAATGCAATCTCCAGACACATGGAGTGCATTCGATTCGAGACTTTAG 116  
Db 206 AsntYrhrCysgluleuLysTyrGlUGlyLysleuValarghrhrThrgluLys 225  
QY 117 AAACACATCTCTATGACACACAGCCACAAATCCACCTTCATTCGATTCG 164  
Db 226 ValThrAlaLeuThraAspLysProProLysProLeuPheProMetGluAsnGlnPro 245  
QY 165 -----CTGCAGATTGACAA 179  
Db 246 SerValleaspValGlnleuGlyLys 254  
RESULT 12  
Sequence 4, Application US/09173151A  
Patent No. 6326472  
GENERAL INFORMATION:  
APPLICANT: Timans, Jacqueline C.  
APPLICANT: Debets, Johannes Eduard Maria  
APPLICANT: Antonius  
APPLICANT: Sana, Theodore R.  
APPLICANT: Bazan, J. Fernando  
APPLICANT: Kastelein, Robert A.  
TITLE OF INVENTION: Human Receptor Proteins; Related Reagents and Methods  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: DNAX Research Institute  
STREET: 901 California Avenue  
CITY: Palo Alto  
STATE: California  
COUNTRY: USA  
ZIP: 94304-1104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/173,151A  
FILING DATE: 14-OCT-1998  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/065,776  
FILING DATE: 17-NOV-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/078,008  
FILING DATE: 12-MAR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/081,883  
FILING DATE: 15-APR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/095,987  
FILING DATE: 10-AUG-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/078,416  
FILING DATE: 18-MAR-1998

FILING DATE: January 15, 1993

FILING DATE: January 15,  
ATTORNEY/AGENT INFORMATION:

FILING DATE: January 15, 1993

FILING DATE: January 15,  
ATTORNEY/AGENT INFORMATION:

NAME: Fraser, Janis K.  
REGISTRATION NUMBER: 34,819  
REFERENCE/DOCKET NUMBER: 04590/007001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 542-5070  
TELEFAX: (617) 542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 357  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
PCT-US94-00545-12

Alignment Scores:  
Pred. No.: 2.76 Length: 357  
Score: 63.00 Matches: 18  
Percent Similarity: 45.76% Conservative: 9  
Local Similarity: 30.51% Mismatches: 32  
Query Match: 16.03% Indels: 0  
DB: 5 Gaps: 0

US-09-049-696-5 (1-220) x PCT-US94-00545-12 (1-357)

QY 14 CTGTACAGACAAACCAACAAAGAGCTCCAAACAAATCAAAATGCAATCT 73  
Db 264 MetTrpIysThrSerProAspProSerProValSerAlaProSerLysAlaGlyLeu 283  
QY 74 CCGAAGCAGATGGAGAGTCCGTCGTGAGACTTAAAGAAACCACTCCTATGAC 133  
Db 284 ProArgHisIleTyrProAlaValAlaGluPheLeuGlyProCysGluGlnGlyAlaArg 303  
QY 134 AACACAGCCCAATCCACCTTCATTCATTCGACAGATTGACAAAGAAATGTGTG 190  
Db 304 AsnSerAlaProGluSerIleLeuLeuValProProThrIleProLysProLeuVal 322

RESULT 15  
5386025-6  
PATENT NO. 5386025  
APPLICANT: JAY, SCOTT D.; ELLIS, STEVEN B.; HARPOLD, MICHAEL  
M.; CAMPBELL, KEVIN P.  
TITLE OF INVENTION: CALCIUM CHANNEL COMPOSITIONS AND METHODS  
NUMBER OF SEQUENCES: 9  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/482,384  
FILING DATE: 20-FEB-1990  
SEQ ID NO: 6  
LENGTH: 1872  
5386025-6

Alignment Scores:  
Pred. No.: 5.82 Length: 1872  
Score: 62.00 Matches: 23  
Percent Similarity: 48.00% Conservative: 13  
Best Local Similarity: 30.67% Mismatches: 24  
Query Match: 15.62% Indels: 15  
DB: 6 Gaps: 3

US-09-049-696-5 (1-220) x 5386025-6 (1-1872)

QY 216 TGCCTTCAGATTGTCAAGAGCTAAACACACAATTTTGTCCAAATCGCAGCAATGAGA 157  
Db 501 CysPheValValCysSerGlyIleLeuGluLeuLeuValGluSerGlyAlaMet-Th 520  
QY 156 AGGT--GGGATTTGGTGGCTGTGTGTCATAGAGAGTGTTCCTTAAGTCCCTCAGAA 100  
Db 520 rProLeuGlyIleSerValLeuArgCysIleArg-----LeuLeuArgLeuPheLysI 538  
QY 99 CAGGATCACTTCCCATGTGCTTG-----GA 73  
Db 538 ethrLysTyrTrpThrSerLeuSerAsnLeuValAlaSerLeuLeuAsnSerIleArgse 558

QY 72 GATTGCATTTTGGATTTTGGCTTGTGGAGCTTCTTGTGTG 30  
Db 558 rIleAlaSerLeuLeuLeuLeuLeuPheLeuPheIleIleIle 572

Search completed: October 17, 2002, 17:59:18  
Job time: 10.1794 secs

This Page Blank (uspto)

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 : Search time 6.52192 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-4

Perfect score: 181

Sequence: 1 CAAAGATGCACATTCATCAATA.....ACAAGCAAAATCAAAATGC 181

Scoring table:

IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

arched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

Issued Patents\_NA: \*  
1: /cgn2\_6/ptodata/2/ina/5A.COMB.seq: \*  
2: /cgn2\_6/ptodata/2/ina/5B.COMB.seq: \*  
3: /cgn2\_6/ptodata/2/ina/6A.COMB.seq: \*  
4: /cgn2\_6/ptodata/2/ina/6B.COMB.seq: \*  
5: /cgn2\_6/ptodata/2/ina/PCITUS.COMB.seq: \*  
6: /cgn2\_6/ptodata/2/ina/Backfile1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	179.4	99.1	3007	4	US-09-193-562D-27
2	74.2	41.0	3317	4	US-09-193-562D-1
3	72.8	40.2	3418	4	US-09-193-562D-29
4	66.4	36.7	3022	4	US-09-193-562D-33
5	58.8	32.5	2970	4	US-09-193-562D-31
6	36.8	20.3	5156	2	US-09-091-432-3
7	35	19.3	1794	3	US-09-012-515A-13
8	35	19.3	1794	3	US-08-360-144A-13
9	35	19.3	1794	5	PCT-US95-06722-13
10	32.6	18.0	1534	1	US-08-300-903A-6
11	32.2	17.8	1117	4	US-09-247-373B-33
12	31.2	17.2	1401	1	US-08-785-066-1
13	31.2	17.2	1401	3	US-09-007-355-1
14	31.2	17.2	1401	3	US-08-913-489-1
15	31.2	17.1	1838	2	US-09-091-432-1
16	30.4	16.8	3414	1	US-07-973-320-3
17	30.2	16.7	974	2	US-08-504-459-13
18	28.6	16.4	1743	2	US-08-591-079-1
19	28.2	16.1	7859	1	US-07-854-596B-4
20	29.2	16.1	7859	2	US-08-450-905B-15
21	29.2	16.1	7859	3	US-07-982-759F-15
22	29	16.0	621	4	US-08-951-822-6
23	29	16.0	621	4	US-09-368-951-6
24	29	16.0	1454	2	US-08-713-000-7
25	29	16.0	1454	2	US-08-975-316-7
26	29	16.0	1454	4	US-09-211-710-7
27	29	16.0	1474	2	US-08-975-316-71

28	29	16.0	2280	3	US-08-813-150-1	Sequence 1, Appl
29	16.0	90050	4	US-09-245-041-5	Sequence 5, Appl	
30	28.8	15.9	729	1	US-08-231-342-24	Sequence 24, Appl
31	28.8	15.9	729	1	US-08-231-342-25	Sequence 25, Appl
32	28.8	15.9	1366	1	US-08-231-342-22	Sequence 22, Appl
33	28.8	15.9	3414	1	US-07-973-320-1	Sequence 1, Appl
34	28.8	15.9	5892	3	US-08-755-587-27	Sequence 27, Appl
35	28.8	15.9	7240	3	US-08-755-587-15	Sequence 15, Appl
36	28.8	15.9	11283	2	US-08-603-753D-3	Sequence 3, Appl
37	28.8	15.9	11283	3	US-09-099-753-3	Sequence 3, Appl
38	28.8	15.9	11283	4	US-08-986-106-3	Sequence 3, Appl
39	28.8	15.9	11385	2	US-08-639-501-1	Sequence 1, Appl
40	28.8	15.9	11385	3	US-09-044-946-1	Sequence 1, Appl
41	28.8	15.9	11385	3	US-09-044-908-1	Sequence 1, Appl
42	28.6	15.8	467	2	US-08-841-349-18	Sequence 18, Appl
43	28.4	15.7	1215	2	US-09-092-770-8	Sequence 8, Appl
44	28.4	15.7	1215	4	US-09-222-851-8	Sequence 8, Appl
45	28.2	15.6	1134	3	US-09-248-335-29	Sequence 29, Appl

#### ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
; Sequence 27, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Paul, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 27
; LENGTH: 3007
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-193-562D-27

Query Match: 99.1%; Score 179.4; DB 4; Length 3007;
Best Local Similarity 99.4%; Pred. No. 5.3e+45;
Matches 180; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 CAAAGATGCACATTCATTAAGTAACAGACTATGAAAGATGAGTTGTCT 60
|||||
DB 667 CAAAGATGCACATTCATTAAGTAACAGACTATGAAAGATGAGTTGTCT 726
|||||
OY 61 CCAATCCCGCCAGCGAGGAGGCTTCTAATGTTTGCACAACATGTTGATTAAGT 120
|||||
DB 727 CCAATCCCGCCAGCGAGGAGGCTTCTAATGTTTGCACAACATGTTGATTAAGT 786
|||||
OY 121 TCAATTCGTACGAACAACCAACAACAAGATCCAAACGCAAAATCAAAATG 180
|||||
DB 787 TCAATTCGTACGAACAACCAACAACAAGATCCAAACGCAAAATCAAAATG 846
|||||
OY 181 C 181
|
DB 847 C 847

RESULT 2
US-09-193-562D-1
; Sequence 1, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Paul, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
```

Query Match	41.08;	Score 74.2;	DB 4;	length 3317;
Best Local Similarity	64.08;	Pred. No. 2e-13;		
Matches 112; Conservative	0;	Mismatches 63;	Indels 0;	Gaps 0;

RESULT 3  
US-09-193-562D-29  
; Sequence 29, Application US/09193562D  
; Patent No. 6200057

Query match	40.2%	Score 72.8	DB 4	Length 3418
Best Local Similarity	66.7%	Pred. No. 5.4e-13		
Matches 104; Conservative	0	Mismatches 52	Indels 0	Gaps 0

RESULT 4  
US-09-193-562D-33  
; Sequence 33, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:

Query Match	36.7%	Score 66.4	DB 4	Length 3022
Best Local Similarity	64.1%	Pred. No. 4.3e-11		
Matches 100; Conservative	0	Mismatches 56	Indels 0	Gaps 0

RESULT 5  
US-09-193-562D-31

Query Match	32.5%;	Score 58.8;	DB 4;	Length 2970;
Best Local Similarity	62.0%;	Pred. No. 8.3e-09;		
Matches 93; Conservative	0;	Mismatches 57;	Indels 0;	Gaps 0

RESULT 6  
US-09-091-432-3/c  
; Sequence 3, Application US/09091432  
; Patent No. 5981837



```

TELEFAX: 617-832-7000
:
: INFORMATION FOR SEQ ID NO: 13:
:
: SEQUENCE CHARACTERISTICS:
:   LENGTH: 1794 base pairs
:   TYPE: nucleic acid
:   STRANDEDNESS: both
:   TOPOLOGY: linear
:
: MOLECULE TYPE: CDNA
:
: FEATURE:
:   NAME/KEY: CDS
:   LOCATION: 1..1686
:
: US-09-012-515A-13
:
Query Match          19.3%, Score 35; DB 3; Length 1794;
Best Local Similarity 54.2%; Pred. No. 0.099;
Matches 71; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY  47  TGTAGTTGTTCCTCCATCCCGCAGACGAGAGGCTTCTATATGTTGCACACAT 106
      ||| ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db   1372 TGGGGGTTTGATTTCCCAACAAAGCGGTGGCTGATCAACGGGTATCTCCACAA 1431

QY  107 GTTATCTTATAGTTGAATTCCTGTACAGACAAACCAACAAAGAGCTCCAAACAAG 166
      || || || || || || || || || || || || || || || || || || ||
Db   1432 GTCAACATCGACAGATTATTACGCAGACAGACAGATTGACGAAAAAGAGCTTAAGATTG 1491

QY  167 CAAATCAAAA 177
      ||||| |||||
Db   1492 CAAAGCAAAA 1502

RESULT 8
US-08-360-144A-13
: Sequence 13, Application US/08360144A
: Patent No. 6150137
:
: GENERAL INFORMATION:
:   APPLICANT: Berlin, Vivian
:   APPLICANT: Chiu, Maria Isabel
:   APPLICANT: Cottarel, Guillaume
:   APPLICANT: Damagnez, Veronique
:   TITLE OF INVENTION: IMMUNOSUPPRESSANT TARGET PROTEINS
:   NUMBER OF SEQUENCES: 35
:   CORRESPONDENCE ADDRESS:
:     ADDRESSEE: FOLEY, HOAG & ELIOT LLP
:     STREET: One Post Office Square
:     CITY: Boston
:     STATE: MA
:     COUNTRY: USA
:     ZIP: 02109-2170
:
: COMPUTER READABLE FORM:
:   MEDIUM TYPE: Floppy disk
:   COMPUTER: IBM PC compatible
:   OPERATING SYSTEM: PC-DOS/MS-DOS
:   SOFTWARE: PatentIn Release #1.0, Version #1.30
:
: CURRENT APPLICATION DATA:
:   APPLICATION NUMBER: US/08/360,144A
:   FILING DATE: 20-DEC-1994
:   CLASSIFICATION: 435
:   ATTORNEY/AGENT INFORMATION:
:     NAME: Vincent, Matthew P.
:     REGISTRATION NUMBER: 36,709
:     REFERENCE/DOCKET NUMBER: APV-036.02
:   TELECOMMUNICATION INFORMATION:
:     TELEPHONE: 617-832-1000
:     TELEFAX: 617-832-7000
:   INFORMATION FOR SEQ ID NO: 13:
:     SEQUENCE CHARACTERISTICS:
:       LENGTH: 1794 base pairs
:       TYPE: nucleic acid
:       STRANDEDNESS: both
:       TOPOLOGY: linear
:     MOLECULE TYPE: CDNA
:     FEATURE:
:       NAME/KEY: CDS

```

LOCATION: 1..1686  
US-08-360-144A-13

Query Match  
Best Local Similarity 19.3%; Score 35; DB 3; Length 1794;  
Matches 71; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 47 TGTGAGTTGTTCTCCAAATCCCGCAGAGAGAGGCTTCTATATAGTTTGACACACAT 106  
DB 1372 TGGGGGTTTGAATTCCTCAAGAGGCGTTGGCTGATATCAAGGGGTATACGTTCACAA 1431  
QY 107 GTTGATCTATAGTTGATTTCTGACAGACAAACCAACAAAGAGCTCCAAACAG 166  
DB 1432 GTCAACACTGCGAATTTATGACAGAGACAGATTGCGAAAAAGAGCTGTAAGATTG 1491  
QY 167 CAAATCAAAA 177  
DB 1492 CAAAGCAAAA 1502

## RESULT 9

US95-06722-13  
Sequence 13, Application PC/TUS9506722

GENERAL INFORMATION:  
APPLICANT:  
TITLE OF INVENTION: Immunosuppressant Target Proteins  
NUMBER OF SEQUENCES: 25  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII (text)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/06722  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/250,795  
FILING DATE: 27-MAY-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/250,795  
FILING DATE: 27-MAY-1994  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1794 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: both  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..1686  
PCT-US95-06722-13

Query Match  
Best Local Similarity 19.3%; Score 35; DB 5; Length 1794;  
Matches 71; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 47 TGTGAGTTGTTCTCCAAATCCCGCAGAGAGAGGCTTCTATATAGTTTGACACACAT 106  
DB 1372 TGGGGGTTTGAATTCCTCAAGAGGCGTTGGCTGATATCAAGGGGTATACGTTCACAA 1431  
QY 107 GTTGATCTATAGTTGATTTCTGACAGACAAACCAACAAAGAGCTCCAAACAG 166  
DB 1432 GTCAACACTGCGAATTTATGACAGAGACAGATTGCGAAAAAGAGCTGTAAGATTG 1491  
QY 167 CAAATCAAAA 177  
DB 1492 CAAAGCAAAA 1502

RESULT 10  
US-08-300-903A-6

Sequence 6, Application US/08300903A  
Patent No. 5591630

GENERAL INFORMATION:  
APPLICANT: Anderson, Dirk M  
APPLICANT: Giri, Judith G  
TITLE OF INVENTION: Interleukin-15 Receptors  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Immunex Corporation  
STREET: 51 University Street  
CITY: Seattle  
STATE: Washington  
COUNTRY: USA  
ZIP: 98101  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: Apple Macintosh  
OPERATING SYSTEM: Apple Operating System 7.1  
SOFTWARE: Microsoft Word for Apple, Version 5.1a  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/300,903A  
FILING DATE: 06-SEPTEMBER-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: USSN 08/236,919  
FILING DATE: 06-MAY-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Perkins, Patricia Anne  
REGISTRATION NUMBER: 34,695  
REFERENCE/DOCKET NUMBER: 2822-A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 206-587-0430  
TELEFAX: 206-233-0644  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1534 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..753  
US-08-300-903A-6

Query Match  
Best Local Similarity 18.0%; Score 32.6; DB 1; Length 1534;  
Matches 56; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

QY 84 CTTCTATATAGTTTGCACACATGTTGATTTCTATAGTTGATTTCTGACAGACAAAC 143  
DB 1433 CTTGATATTAACAAATTAACACATCTATTTTCAATATTTTAAATGCAAAAAA 1492  
QY 144 ACAACAAAGAGCTCCAAACAGCAAGCAAAATCAAAA 178  
DB 1493 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1527

## RESULT 11

US-09-247-373B-33  
Sequence 33, Application US/09247373B  
Patent No. 6168954  
GENERAL INFORMATION:  
APPLICANT: MCGONIGLE, BRIAN  
APPLICANT: O'KEEFE, DANIEL  
TITLE OF INVENTION: SOYBEAN GLUTATHIONE-S-TRANSFERASE ENZYMES  
FILE REFERENCE: CL-1108-A  
CURRENT APPLICATION NUMBER: US/09/247,373B  
CURRENT FILING DATE: 1999-02-10  
PRIOR APPLICATION NUMBER: 08/924,747

```

; SEQUENCE CHARACTERISTICS:
; LENGTH: 1401 base pairs

```

US-09-007-355-1

```
Query Match      17.28; Score 31.2; DB 3; Length 1401;
```

Best Local Similarity 50.7%; Pred. No. 1.3;  
Matches 75; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

QY 13 ATTCATTAAGTAAAGAGCTCTATGAAAAGAGATGTGTTCTCCATCCCGCA 72  
DB 1167 AATTGATTAATTTAAAGCATTATTCATCAATTTTCAAGCGATGTTTAA 1226  
QY 73 GACGGAAGAGCTCTATTAATCTTTCACACATGTGCTATAGTTGAATCTGTAC 132  
DB 1227 ATCTAAATGATGATATTTGATGATGATGATGATGATGATGATGATGATGAT 1286  
QY 133 AGAACAACCAACCAACCAAGAGCTCCA 160  
DB 1287 TGAAGCAAGGAAAAAACAAGATTTCGA 1314

# RESULT 14

US-08-913-489-1  
Sequence 1, Application US/08913489  
Patent No. 6080717

## GENERAL INFORMATION:

APPLICANT: Hodgson, John  
APPLICANT: Lawlor, Elizabeth  
TITLE OF INVENTION: No. 6080717el tRNA Synthetase  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Smlnkline Beecham Corporation  
STREET: 709 Swedeland Road  
CITY: King of Prussia  
STATE: PA  
COUNTRY: USA  
ZIP: 19406-0939

COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: Fastseq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/913,489

CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/785,066  
FILING DATE:  
FILING DATE: 30-Oct-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Gimmil, Edward R  
REGISTRATION NUMBER: 38,891  
REFERENCE/DOCKET NUMBER: P31355-4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 610-270-4478  
TELEFAX: 610-270-5090

## TELEX:

INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1401 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: Genomic DNA  
US-08-913-489-1

Query Match 17.2%; Score 31.2; DB 3; Length 1401;  
Best Local Similarity 50.7%; Pred. No. 1.3;  
Matches 75; Conservative 0; Mismatches 73; Indels 0; Gaps 0;

QY 13 ATTCATTAAGTAAAGAGCTCTATGAAAAGAGATGTGTTCTCCATCCCGCA 72  
DB 1167 AATTGATTAATTTAAAGCATTATTCATCAATTTTCAAGCGATGTTTAA 1226  
QY 73 GACGGAAGAGCTCTATTAATCTTTCACACATGTGCTATAGTTGAATCTGTAC 132

DB 1227 ATCTAAATGATGATATTTGATGATGATGATGATGATGATGATGATGATGAT 1286  
QY 133 AGAACAACCAACCAACCAAGAGCTCCA 160  
DB 1287 TGAAGCAAGGAAAAAACAAGATTTCGA 1314

# RESULT 15

US-09-091-432-1/c  
Sequence 1, Application US/09091432  
Patent No. 5981837

## GENERAL INFORMATION:

APPLICANT: Chapple, Clint  
TITLE OF INVENTION: A Method For Regulation Of Plant Lignin Composition  
FILE REFERENCE: 7024-325  
CURRENT APPLICATION NUMBER: US/09/091,432  
CURRENT FILING DATE: 1998-06-18  
EARLIER APPLICATION NUMBER: PCT/US96/20094  
EARLIER FILING DATE: 1996-12-19  
EARLIER APPLICATION NUMBER: US 60/009,119  
EARLIER FILING DATE: 1995-12-22  
EARLIER APPLICATION NUMBER: US 60/013,388  
EARLIER FILING DATE: 1996-03-14  
SOFTWARE: Microsoft Word 2.0C  
SEQ ID NO 1  
LENGTH: 1838  
TYPE: DNA  
ORGANISM: Arabidopsis thaliana  
US-09-091-432-1

Query Match 17.1%; Score 31; DB 2; Length 1838;  
Best Local Similarity 56.3%; Pred. No. 1.6;  
Matches 58; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

QY 76 GGAAGAGCTCTATTAATGTTTGCACACATGTGATCTATAGTTGATCTGTACAGA 135  
DB 1819 GCAACATGCTAAATTAATGATGAAAAAATCTTATTTTACGTGATTCATTCAG 1760  
QY 136 ACNAACCAACCAACCAAGAGCTCCAACCAACCAATCAAAA 178  
DB 1759 GAAATATCCCATTAAGAAAAAAGGCAACCAAGA 1717

Search completed: October 17, 2002, 11:13:02  
Job time : 11.5219 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

## OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 : Search time 5.08397 Seconds  
(Without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-4

Sequence: 1 CAAAGATGCATTCATCAATA.....ACAAGCAAAATCAAAATGC 181

## Scoring table:

BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL=framer\_n2p\_model -DEV=xlh  
-O=/cg2\_1/USFTO.spool/US09049696/runat.16102002.115821\_24739/app\_query.fasta.1.13694  
-DB=Issued.Patents\_AA -OPMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi  
-LIST=45 -DOCALLIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTMT=ptc -NORM=ext -HEAPSIZ=500 -MINLEN=0 -MAXLEN=200000000  
-USBR=US09049696.ecgn1.1.57\_etunal.16102002.115821\_24739 -NCP=6 -ICP=3  
-NO\_XLPHY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG -DEV\_TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREDS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

## Database :

Issued.Patents\_AA.\*  
1: /cg2\_6/ptodata/2/iaa/5a\_COMB.pep.\*  
2: /cg2\_6/ptodata/2/iaa/5b\_COMB.pep.\*  
3: /cg2\_6/ptodata/2/iaa/6a\_COMB.pep.\*  
4: /cg2\_6/ptodata/2/iaa/6b\_COMB.pep.\*  
5: /cg2\_6/ptodata/2/iaa/PTUS\_COMB.pep.\*  
6: /cg2\_6/ptodata/2/iaa/backfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	324	100.0	914	4	US-09-193-562D-28
2	169	52.2	902	4	US-09-193-562D-34
3	168	51.9	1000	4	US-09-193-562D-30
4	165	50.9	903	4	US-09-193-562D-46
5	160	49.4	342	4	US-09-193-562D-13
6	160	49.4	795	4	US-09-193-562D-11
7	160	49.4	821	4	US-09-193-562D-12
8	160	49.4	905	4	US-09-193-562D-2
9	156.5	48.3	943	4	US-09-193-562D-32
c 10	66	20.2	1786	2	US-08-477-451-16
c 11	59.5	18.3	1817	4	US-09-004-838-125
12	58	17.9	139	2	US-08-219-237B-8

13	58	17.9	140	4	US-08-477-347-17	Sequence 17, Appl
14	58	17.9	140	4	US-08-476-862-8	Sequence 8, Appl1
15	58	17.9	205	3	US-08-974-022-51	Sequence 51, Appl
16	58	17.9	205	4	US-08-795-445A-51	Sequence 51, Appl
17	58	17.9	205	4	US-08-974-186-51	Sequence 51, Appl
18	58	17.9	205	4	US-08-974-186-51	Sequence 51, Appl
19	58	17.9	205	4	US-08-795-446B-51	Sequence 51, Appl
c 20	56.5	17.3	287	1	US-07-915-934-2	Sequence 2, Appl1
c 21	56.5	17.3	287	1	US-08-325-743-2	Sequence 2, Appl1
22	56.5	17.4	1140	4	US-09-220-081-2	Sequence 2, Appl1
23	56.5	17.4	2329	3	US-08-755-587-16	Sequence 16, Appl
24	56.5	17.4	3418	2	US-08-639-501-2	Sequence 2, Appl1
25	56.5	17.4	3418	2	US-08-603-753D-4	Sequence 2, Appl1
26	56.5	17.4	3418	3	US-09-044-946-2	Sequence 2, Appl1
27	56.5	17.4	3418	3	US-08-755-587-44	Sequence 44, Appl
28	56.5	17.4	3418	3	US-09-044-908-2	Sequence 2, Appl1
29	56.5	17.4	3418	4	US-09-099-753-4	Sequence 4, Appl1
30	56.5	17.4	3418	4	US-08-986-106-4	Sequence 4, Appl1
c 31	56	17.2	360	4	US-09-116-498-10	Sequence 10, Appl
c 32	56	17.2	374	4	US-09-045-583-48	Sequence 48, Appl
33	56	17.3	450	4	US-09-457-046B-67	Sequence 67, Appl
c 34	55.5	17.0	1684	3	US-08-665-259-25	Sequence 25, Appl
c 35	55.5	17.0	1684	3	US-08-762-500-25	Sequence 25, Appl
c 36	55.5	17.0	1704	3	US-08-762-500-75	Sequence 75, Appl
37	55	17.0	2548	4	US-09-172-422-1	Sequence 1, Appl1
c 38	55	16.9	3200	2	US-08-477-451-8	Sequence 8, Appl1
39	54.5	16.8	401	3	US-08-517-802-3	Sequence 3, Appl1
40	54	16.7	200	4	US-09-199-637A-373	Sequence 373, App
41	54	16.7	583	4	US-09-272-414-2	Sequence 2, Appl1
42	54	16.7	755	4	US-07-861-458C-99	Sequence 99, Appl
43	54	16.7	894	1	US-08-117-62-4	Sequence 4, Appl1
44	54	16.7	894	1	US-08-486-924-4	Sequence 4, Appl1
45	53	16.4	321	1	US-08-447-185-1	Sequence 1, Appl1

## ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
: Sequence 28, Application US/09193562D  
: Patent No. 6309857  
: GENERAL INFORMATION:  
: APPLICANT: Pauli, Benedicth U.  
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
: FILE REFERENCE: 18617.0052  
: CURRENT APPLICATION NUMBER: US/09/193.562D  
: CURRENT FILING DATE: 1998-11-17  
: PRIOR APPLICATION NUMBER: US/60/065,922  
: PRIOR FILING DATE: 1997-11-17  
: NUMBER OF SEQ ID NOS: 47  
: SEQ ID NO 28  
: LENGTH: 914  
: TYPE: PRT  
: ORGANISM: Homo sapiens  
US-09-193-562D-28

## Alignment Scores:

Pred. No.: 1.46e-37 Length: 914  
Score: 324.00 Matches: 60  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 100.00% Indels: 0  
DB: Gaps: 0

US-09-049-696-4 (1-181) x US-09-193-562D-28 (1-914)

OY 2 AAAAGATGCATTCATTAAGTACAGGACTCTATATAAAGATGTGATTTGTTCTC 61  
|||||  
Db 208 LysArgCysThrPheAsnLysValThrGlyLeuYsgLysGlyCysGluPheValLeu 227  
|||||  
OY 62 CAATCCGCGCAGAGGAGGAGGCGCTTCATATATGTTTCACACATGTTGATTCATAGTT 121  
|||||

```

Query Match:      51.85%      Indels:      0
DB:               4          Gaps:         0

US-09-049-696-4 (1-181) x US-09-193-562D-30 (1-1000)

QY   26 ACAGGACGTCTATGAATAAAGATGGTAGTGTTCCTCCAAATCCCGCAGACGAGAAGGCT 85
    DB 216 TTTGTTTTTTTTTTTT ||| |:::~::~ (||||| |||
        TTTGTTTTTTTTTTTTAlalyscsthrrPheilleProLysargSerIntHrAlalysGlu 235
QY   86 TCTATAATGTTTGACAACACATGTGATTCTATAGTTGAATTCGTGCAGAACAAAACCAC 145
    DB 236 SerIleValPheMetGlnAsnLeuAspSerValTHrGlubPheCystHrGluysThrHis 255
QY   146 AACAAAGAAGCTCCCAACACAGCAAAATCAAATGTC 181
    DB 256 AsnLysGluAlaProAsnLeuTrpAsnLysMetCys 267

RESULT 4
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide sequences encoding mammalian calcium
; TITLE OF INVENTION: Activated chloride channel-adhesion molecules
; FILE REFERENCE: 18617_0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016
US-09-193-562D-46

Alignment Scores:
Pred. No.:      4.7e-15      Length:      903
Score:          165.00      Matches:     30
Percent Similarity: 65.52%      Conservative: 8
Best Local Similarity: 51.72%      Mismatches: 20
Query Match:    50.93%      Idels:       0
DB:             4          Gaps:         0

US-09-049-696-4 (1-181) x US-09-193-562D-46 (1-903)

QY   8  TGCACTCATTAATAAGTACAGACTATGAAAAAGATGTGACTTGTTCCTCCAATCC 67
    DB 210 CysArgtaArgaSerGlnThrglyLeuTyrgclAlalysCysThrPheIleproLuls 229
QY   68 CGCCAGACGAGGAGGCGTCTATATAATGTTTGACAACATGTGATTCATAGTGAATTC 127
    DB 230 SerGlnThrAlaArgGluSerIleMetPheMetGlnSerLeuHisSerValThrGluPhe 249
QY   128 TGTACAGAACAAAACACACAAAGAGCTCCAAAACAAAGCAAAATCAAATAATGC 181
    DB 250 CysThrGluLysThrHisAsnValGluAlaProAsnLeuGlnAsnLysMetCys 267

RESULT 5
US-09-193-562D-13
; Sequence 13, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18611_0052
; CURRENT APPLICATION NUMBER: US/09/193,562D

```

```

OY 128 TGTACGACCAAAACCAACAAAGAGCTCCAAACAAAGCAAAATGCAAAATGC 181
      |||||||:||||| ||||||| |||||||: |||
Db 251 CysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLysMetCys 268

RESULT 7
US-09-193-562D-12
; Sequence 12, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065.922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 12
; LENGTH: 821
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-12

Alignment Scores:
Pred. NO.: 2.34e-14 Length: 821
Score: 160.00 Matches: 30
Percent Similarity: 63.79% Conservative: 7
Best Local Similarity: 51.72% Mismatches: 21
Query Match: 49.38% Indels: 0
DB: 4 Gaps: 0

US-09-049-696-4 (1-181) x US-09-193-562D-12 (1-821)

OY 8 TGCACATTCATTAAGTAAAGTACAGACTCTATGAAAGAGTGTGTTCTCCATTC 67
      ||| :||| ||||| ||||| ||| |||: |||
Db 211 CysatgatagabsSerGlnThrGlyLeuThrGluAlaLysCysThrPheLeuProLysLys 230Q
      ||||| || ||||| ||||| ||||| :||| |||: |||
OY 68 CGCCAGACGAGGAAGCGCTTCTATATGTTTGCACACATGTTGATTCATAGTTGAATTC 127
      ||||| || ||||| ||||| ||||| :||| |||: |||
Db 231 SerGlnThrAlaLysGlnSerIleMetPheMetProSerLeuHisSerValThrGluPhe 250Q
      ||||| || ||||| ||||| ||||| :||| |||: |||
OY 128 TGTACGACCAAAACCAACAAAGAGCTCCAAACAAAGCAAAATGCAAAATGC 181
      |||||||:||||| ||||||| |||||||: |||
Db 251 CysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLysMetCys 268

RESULT 8
US-09-193-562D-2
; Sequence 2, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065.922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 2
; LENGTH: 905
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells
US-09-193-562D-2

Alignment Scores:
Pred. NO.: 2.4e-14 Length: 905

```

Score: 160.00  
Percent Similarity: 63.798  
Best Local Similarity: 51.728  
Query Match: 49.388  
DB: 4  
Matches: 30  
Conservative: 7  
Mismatches: 21  
Indels: 0  
Gaps: 0

US-09-049-696-4 (1-181) x US-09-193-562D-2 (1-905)

QY 8 TGCACATTCAATTAAGTACAGAGCTCTATGAAAAAGATGTGTTGTTCCATCC 67  
DB 211 CysArgArgAspSerGlnThrGlyLeuYrGlnAlaLysCysThrPheLeuProLys 230  
QY 68 CCGCAGACGAGAGAGCTCTATTAATGTTGCACAAATGTGATCTTAAGTGAATTC 127  
DB 231 SerGlnThrAlaLysLeuSerIleMetPheMetProSerLeuHisSerValThrGluPhe 250  
QY 128 TGTACAGAAACCAACCAACAGAGCTCCAAACAGCAAAATCAAAAAATGC 181  
DB 251 CysThrGlnLysThrHisSerThrGlnAlaProAsnLeuGlnAsnLysMetCys 268

RESULT 9

Sequence 32, Application US/09193562D  
Patent No. 6309857

GENERAL INFORMATION:

APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193.562D  
PRIOR FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065.922  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 32  
LENGTH: 943  
TYPE: PRT  
ORGANISM: Homo sapiens

US-09-193-562D-32

Alignment Scores:

Pred. No.: 7.59e-14 Length: 943  
Score: 156.50 Matches: 29  
Percent Similarity: 63.33% Conservative: 9  
Best Local Similarity: 48.33% Mismatch: 19  
Query Match: 48.30% Indels: 3  
DB: 4 Gaps: 1

US-09-049-696-4 (1-181) x US-09-193-562D-32 (1-943)

2 AAAGATGCACATTCATTAAGTACAGAGCTCTATGAAAAAGATGTGTTGTTCTC 61  
DB 214 GlnAsnGlyIleLeuSerYs-----LeuPheLysGlnGlySerThrPheIleYr 230  
QY 62 CAATCCGCGACAGCGAGAGGCTCTATTAATGTTGCACAAATGTGATCTTAAGT 121  
DB 231 AsnSerThrGlnAsnAlaThrAlaSerIleMetPheMetInsLeuSerValVal 250  
QY 122 GAATTCGTGTACAGACAAACACACAGAGAGCTCCAAACAGCAAAATCAAAAAATGC 181  
DB 251 GluPheCysAsnAlaSerThrHisSerGlnGlnAlaProAsnLeuGlnAsnLysMetCys 270

RESULT 10

US-08-477-451-16  
Sequence 16, Application US/08477451  
Patent No. 5928865

GENERAL INFORMATION:

APPLICANT: Covacci, Antonello  
TITLE OF INVENTION: Helicobacter pylori CagI Region  
NUMBER OF SEQUENCES: 46  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Chiron Corporation  
STREET: 4560 Horton Street

CITY: Emeryville

STATE: CA

COUNTRY: USA

ZIP: 94608-2916

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/08/477,451

APPLICATION NUMBER: DATA

FILING DATE: 07-JUN-1995

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: McClung, Barbara G.

REGISTRATION NUMBER: 33,113

REFERENCE/DOCKET NUMBER: 0335.002

TELECOMMUNICATION INFORMATION:

TELEPHONE: 510-601-2708

TELEFAX: 510-655-3542

INFORMATION FOR SEQ ID NO: 16:

SEQUENCE CHARACTERISTICS:

LENGTH: 1786 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-477-451-16

Alignment Scores:  
Pred. No.: 0.585 Length: 1786  
Score: 66.00 Matches: 23  
Percent Similarity: 38.96% Conservative: 7  
Best Local Similarity: 29.87% Mismatch: 17  
Query Match: 20.25% Indels: 30  
DB: 2 Gaps: 4

US-09-049-696-4 (1-181) x US-08-477-451-16 (1-1786)

QY 178 TTTTGTGATTTTGGCTTTGGAGCTTCTTTGTT-----GTGGTTTGTCTGTAC 128  
DB 1385 PheLeuSerPheValLeuSerArgPhePheLeuAsnArgValAlaLeuPhePheLys 1404  
QY 127 GAATTCATCTATGAAATCAACATGTTGTGCAACATTATGAAAGCTTCGTGGGG 68  
DB 1405 ArgPheAsnLeuLeuAsnLeuLeuLys----- 1414  
QY 67 GGATTGGAGACAACTCACATCTCTTTTCATAGAGTCC----- 29  
DB 1415 -----SerArgProIleIleSerPhePheSerGlnSerValSerGlyGluPhePhe 1432  
QY 28 -----TGTACTTT-----ATTGAATGTGCATCTTTT 2  
DB 1433 LeuPheCysAsnPhePheValIleMetSerLeuIleGluCysPheAspPhe 1449

RESULT 11

US-09-004-838-125  
Sequence 125, Application US/09004838  
Patent No. 6350933

GENERAL INFORMATION:

APPLICANT: Michelmore, Richard W.

APPLICANT: Shen, Kathy

TITLE OF INVENTION: Procedures and Materials for

NUMBER OF SEQUENCES: 140

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834



```

1  COMPUTER READABLE FORM:
2  MEDIUM TYPE: Floppy disk
3  COMPUTER: IBM PC compatible
4  OPERATING SYSTEM: PC-DOS/MS-DOS
5  SOFTWARE: Patentin Release #1.0, Version #1.30
6  CURRENT APPLICATION DATA:
7  APPLICATION NUMBER: US/09/004,838
8  FILING DATE: 09-JAN-1998
9  CLASSIFICATION: 800
10 PRIOR APPLICATION DATA:
11 APPLICATION NUMBER: US 08/781,734
12 FILING DATE: 10-JAN-1997
13 ATTORNEY/AGENT INFORMATION:
14 NAME: Einhorn, Gregory P.
15 REGISTRATION NUMBER: 38,440
16 REFERENCE/DOCKET NUMBER: 023070-078810US
17 TELECOMMUNICATION INFORMATION:
18 TELEPHONE: (415) 576-0200
19 TELEFAX: (415) 576-0300
20 INFORMATION FOR SEQ ID NO: 125:
21 SEQUENCE CHARACTERISTICS:
22 LENGTH: 1817 amino acids
23 TYPE: amino acid
24 STRANDEDNESS:
25 TOPOLOGY: linear
26 MOLECULE TYPE: protein
27 FEATURE:
28 NAME/KEY: -
29 LOCATION: 1..1817
30 OTHER INFORMATION: /note="RG25 deduced sequence"
31 US-09-004-838-125

```

```

Alignment Scores:
Pred. No.: 4 89 1817
Score: 59.50 Matches: 15
Percent Similarity: 46.948 Conservative: 8
Best Local Similarity: 30.618 Mismatches: 21
Query Match: 18.254 Indels: 5
DB: 4 Gaps: 2

US-09-049-696-4 (1-181) x US-09-004-838-125 (1-1817)
OY 160 TGGAGCTTCCTTTGTTGTGTGTTTGTCTGTACAGAAATTCACCTATAGATCAACATGCTTG 101
      |||||||  ::::: ||| ||||| :::::
Db 1546 TrrperphenHisansleuilegiuleuaspmetGluLeuansTyrAspAllylsystle 1565
      |||||||  ::::: ||| ||||| :::::
OY 100 TGCAGACATTATAGAACCTTCCTCCGCTGCGGGGATTGGAGAACAACTCATATCTTT 41
      |||||||  ::::: ||| ||||| :::::
      1566 IlleProser---SergIuleuGlnLeu-----GlnlysleuGlnIulysile 1580
OY 40 TTCATGAGAGTCCTGTTACTTATTATGAA 14
      :: ||||||| ::::: |||
Db 1581 HisValsercystyrtrpValGlu 1589

RESULT 12
US-08-219-237B-8
Sequence 8, Application US/08219237B
Patent No. 5874546
GENERAL INFORMATION:
APPLICANT: MAGATA, Shigekazu
APPLICANT: ITOH, Naoto
APPLICANT: YONEHARA, Shin
TITLE OF INVENTION: DNA Coding for Human Cell Surface Antigen
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: James W. Hellwege
STREET: P.O. Box 2266 Eads Station
CITY: Arlington
STATE: Virginia
COUNTRY: USA
ZIP: 22202
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

```

```

>
> COMPUTER: IBM PC compatible
> OPERATING SYSTEM: pc-DOS/MS-DOS
> SOFTWARE: PatentIn Release #1.0, Version #1.25
> CURRENT APPLICATION DATA:
> APPLICATION NUMBER: US/08/219,237B
> FILING DATE: 28-MAR-1994
> CLASSIFICATION: 435
> PRIOR APPLICATION DATA:
> APPLICATION NUMBER: US 07/872,129
> FILING DATE: 22-APR-1992
> CLASSIFICATION: 435
> ATTORNEY/AGENT INFORMATION:
> NAME: James W. Hellwege
> REGISTRATION NUMBER: 28,808
> REFERENCE/DOCKET NUMBER: 516762
> INFORMATION FOR SEQ ID NO: 8:
> SEQUENCE CHARACTERISTICS:
> LENGTH: 139 amino acids
> TYPE: amino acid
> TOPOLOGY: linear
> MOLECULE TYPE: protein
> US-08-219-237B-8
>
Alignment Scores:
Pred. No.:      4          Length:      139
Score:         58.00     Matches:       17
Percent Similarity:   53.66%    Conservative:   5
Best local Similarity: 41.46%    Mismatches:   14
Query Match:        17.90%     Indels:        5
OB:                 2           Gaps:         2

```

```

QY      52 GTTGTGTCCTCAATCCGCCAGACGAGAGAAGGCTTCTATAATGTTTGCACAACAATGTTGA 111
      ||||| ||| ||| ||||| ||||| ||| :||
Db      33 ValGlyHisProCysGluPro-----GlyPheTyrAsnGlu-AlaValAsnTyrAs 49
QY      112 TTCATATGTTCAATTCGTATCAGACAACAAACACACAAAGAGCTCTCAACAACAGTAAA 171
      |||: ||: |||||: ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db      49 pTHcYsAllysGln---CysThrGlnCysAsnHisArgSerGlySerIleuLeuYsGlnAs 68
QY      172 T 172
      |
Db      68 n 68

RESULT 13
US-08-477-347-17
: Sequence 17, Application US/08477347
: Patent No. 623246
:
: GENERAL INFORMATION:
:
: APPLICANT: WALLACH, David
: APPLICANT: BIGDA, Jacek
: APPLICANT: BELETSKY, Igor
: APPLICANT: METU, Igor
:
: TITLE OF INVENTION: TNF LIGANDS
:
: NUMBER OF SEQUENCES: 17
:
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: BROWDY AND NEIMARK
: STREET: 419 Seventh Street, N.W.
: CITY: Washington
: STATE: D.C.
: COUNTRY: USA
: ZIP: 20004
:
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
:
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/477,347
: FILING DATE:
: CLASSIFICATION:
: PRIOR APPLICATION DATA:

```

```

: APPLICATION NUMBER: IL 107267
: FILING DATE: 12-OCT-1993
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: IL 94039
: FILING DATE: 06-APR-1990
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: IL 91229
: FILING DATE: 06-AUG-1989
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: IL 90339
: FILING DATE: 18-MAY-1989
: ATTORNEY/AGENT INFORMATION:
: NAME: BROWDY, Roger L.
: REGISTRATION NUMBER: 25, 618
: REFERENCE/DOCKET NUMBER: WALLACH=12A
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 202-628-5197
: TELEFAX: 202-737-3528
: INFORMATION FOR SEQ ID NO: 8:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 140 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: peptide
: US-08-476-862-8

Alignment Scores:
Pred. No.: 4 Length: 140
Score: 58.00 Matches: 17
Percent Similarity: 53.66% Conservative: 5
Best Local Similarity: 41.46% Mismatches: 14
Query Match: 17.90% Indels: 5
DB: 4 Gaps: 2

US-09-049-696-4 (1-181) x US-08-476-862-8 (1-140)

QY 52 GTTGTGTCATCCGACGAGAGAGCGCTTCTAATGTTTGCAACAATGTTGA 111
| | | | | | | | | | | | | | | | | | | | | | | | | |
Db 34 VALGSHSPYPCQYSGLPD-----GLYPHERYASNGIN-ALVALASNYRAS 50
QY 112 TGTCTAGTTGTAATCTGTACGAGAACAAACCAACAACAACCTCCAAACGACAAA 171
| : : : | : : : | : : : | : : : | : : : | : : : | : : : |
Db 50 phtcrslysgin---CysThrnGlnCysAsnHisArgSerelyserGluLeuYsGlnas 69
QY 172 T 172
|
Db 69 n 69

RESULT 15
US-08-974-022-51
: Sequence 51, Application US/08974022
: Patent No. 6015938
: GENERAL INFORMATION:
: APPLICANT: Boyle, William J.
: APPLICANT: Lacey, David L.
: APPLICANT: Calzone, Frank J.
: APPLICANT: Chang, Ming-Shi
: TITLE OF INVENTION: OSTEOPROTEGERIN
: NUMBER OF SEQUENCES: 53
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Amgen Inc.
: STREET: 1840 Dehavenland Drive
: CITY: Thousand Oaks
: STATE: California
: COUNTRY: USA
: ZIP: 91320-1789
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:

```

APPLICATION NUMBER: US/08/974,022  
FILING DATE: 12-DEC-1995  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/577,788  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Winter, Robert B.  
REFERENCE/DOCKET NUMBER: A-378  
INFORMATION FOR SEQ ID NO: 51:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 205 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-974-022-51

Alignment Scores:  
Seq. No.: 4.43 Length: 205  
Core: 58.00 Matches: 17  
Percent Similarity: 53.66% Conservative: 5  
Best Local Similarity: 41.46% Mismatches: 14  
Query Match: 17.90% Indels: 5  
DB: 3 Gaps: 2

US-09-049-696-4 (1-181) x US-08-974-022-51 (1-205)

OY 52 GTTGTCTCTCCATCCGCCGACGAGAGGCTTCTATATATGTTGCACAAATGTTGA 111  
||||| ||| ||| ||||||||| ||| : : ||  
Db 58 ValCysHisProCysGluPro-----GlyPheTyrAsnGlu-AlaValAsnTyrAs 74  
OY 112 TTCTATAGTGAATCTGTACAGACAAACCACAAACAAGAACTCCAAACAGCAAAA 171  
: : : : ||||| : : ||||| : : : |||||||  
Db 74 pthrcyslsgln---CysThrGlnCysAsnHisarGserGlySerGluLeulysGlnAs 93  
OY 172 T 172  
|  
Db 93 n 93

Search completed: October 17, 2002, 17:59:14  
Job time : 7.08397 secs

***This Page Blank (uspto)***

GenCore version 5.1.3  
Copyright (c) 1993 - 2002, CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 8.64785 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-3

Perfect score: 240  
Sequence: 1 AAAATGCTGATGTTCTGTT.....GAAATCTACTATTCATGCATG 240

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Archived: 38353 seqs, 122816752 residues

Cal number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Issued\_Patents\_NA:\*  
1: /cgn2\_6/prodata/2/ina/5A\_COMB.seq:\*  
2: /cgn2\_6/prodata/2/ina/5B\_COMB.seq:\*  
3: /cgn2\_6/prodata/2/ina/5A\_COMB.seq:\*  
4: /cgn2\_6/prodata/2/ina/5B\_COMB.seq:\*  
5: /cgn2\_6/prodata/2/ina/PCTUS\_COMB.seq:\*  
6: /cgn2\_6/prodata/2/ina/backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	238.4	99.3	3007	4	US-09-193-562D-27
2	109.8	45.7	401	4	US-09-221-298-34
3	99.6	41.5	3418	4	US-09-193-562D-29
4	94.8	39.5	3317	4	US-09-193-562D-1
5	93	38.8	3022	4	US-09-193-562D-33
6	77.6	32.3	2970	4	US-09-193-562D-31
7	34	14.2	5319	1	US-08-169-927-1
8	32.4	13.5	1423	4	US-08-916-576B-3
9	30.6	12.8	4403765	4	US-09-103-840A-2
10	30.6	12.8	4411529	4	US-09-103-840A-1
11	30	12.5	382	4	US-08-916-576B-19
12	30	12.5	396	2	US-08-465-580-11
13	30	12.5	396	2	US-08-480-478-41
14	30	12.5	396	2	US-08-486-397-12
15	30	12.5	396	2	US-08-486-399-12
16	30	12.5	396	2	US-08-461-965-12
17	30	12.5	396	2	US-08-326-110A-41
18	30	12.5	396	2	US-08-634-641-12
19	30	12.5	396	3	US-09-249-471-12
20	30	12.5	396	3	US-09-249-472-12
21	30	12.5	396	3	US-09-249-451-12
22	30	12.5	396	3	US-08-809-455-12
23	30	12.5	396	3	US-09-249-461-12
24	30	12.5	396	3	US-09-249-448-12
25	30	12.5	4693	4	US-09-359-756-1
26	28.8	12.0	771	4	US-08-991-789A-241
27	28.8	12.0	771	4	US-09-062-451-241

28	28.6	11.9	1000	3	US-08-961-083-53	Sequence 53, Appl
29	28.4	11.8	1815	4	US-09-042-785A-24	Sequence 24, Appl
30	28.4	11.8	2186	3	US-08-959-382-1	Sequence 1, Appl
31	28.4	11.8	2632	4	US-09-042-785A-3	Sequence 3, Appl
32	28.4	11.8	2638	4	US-09-042-785A-22	Sequence 22, Appl
33	28.4	11.8	3474	4	US-09-527-236A-1	Sequence 1, Appl
34	27.6	11.5	2071	1	US-08-393-985-15	Sequence 15, Appl
35	27.4	11.4	3607	1	US-08-647-351B-1	Sequence 1, Appl
36	27.2	11.3	4032	1	US-08-107-748-3	Sequence 3, Appl
37	27.2	11.3	4032	1	US-08-245-809-4	Sequence 4, Appl
38	27.2	11.3	4032	5	PCT-US92-01385-3	Sequence 3, Appl
39	26.8	11.2	1101	4	US-08-979-616-1	Sequence 1, Appl
40	26.8	11.2	3417	2	US-08-978-458-7	Sequence 7, Appl
41	26.8	11.2	3417	3	US-08-978-454-7	Sequence 7, Appl
42	26.8	11.2	3417	4	US-09-385-288-7	Sequence 7, Appl
43	26.8	11.2	3417	4	US-08-977-555-7	Sequence 7, Appl
44	26.8	11.2	3417	4	US-08-979-616-7	Sequence 7, Appl
45	26.8	11.2	87350	3	US-08-781-891-79	Sequence 79, Appl

## ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
; Sequence 27, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 27
; LENGTH: 3007
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-193-562D-27

Query Match      99.3%  Score 238.4:  DB 4:  Length 3007:
Best Local Similarity 99.6%:  Pred. No. 1.9e-70:
Matches 239:  Conservative 0:  Mismatches 1:  Indels 0:  Gaps 0:
```

QY 1 AAAATGCTGATGTTCTGTTCTGAGTCTACTCTCCAGGTAATGATGAACCTACACTG 60  
DB 345 AAAATGCTGATGTTCTGTTCTGAGTCTACTCTCCAGGTAATGATGAACCTACACTG 404  
QY 61 AGCAGATGGGCAACTGTGAGAGAGAGAGGTAAGAGATCAACCTCCTCGATTTCATG 120  
DB 405 AGCAGATGGGCAACTGTGAGAGAGAGAGGTAAGAGATCAACCTCCTCGATTTCATG 464  
QY 121 CAGAAAAAAGTTAGCTGATATGAGACACAGATGAGGATTTGTCACAGAGGGCTC 180  
DB 465 CAGAAAAAAGTTAGCTGATATGAGACACAGATGAGGATTTGTCACAGAGGGCTC 524  
QY 181 ATTCAGATGGGAGATTTGAGAGATGACATATGATGAGAAATTTCTACTATTCATG 240  
DB 525 ATTCAGATGGGAGATTTGAGAGATGACATATGATGAGAAATTTCTACTATTCATG 584

```
RESULT 2
US-09-221-298-34
; Sequence 34, Application US/09221298
; Patent No. 6284241
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY AND DIAGNOSIS
; FILE REFERENCE: 210121.471
```

## RESULT 4

61 ACAGATGGGCACTCTGGAGAGAGGGGTGAAGCATCCACCTCAGTTCATTTC 120

Db 373 TTCAGTATGACAGTGTGGGACAGACAGTACATACCTTCAACTTCTAC 432  
QY 121 CAGGAAAAAGTTAGTGAATATGACACACAGTAGGCAATTTGTCATGAGTGGCTC 180  
Db 433 TCAGTATTAAGTTCGATATGATGACCCGAGGACAGAGTCTTTGTCATGAGTGGCC 492  
QY 181 ATCTAGATGGGAGATTTGACGATACATTAATGATGAGAAATTTCTACTTATCA 237  
Db 493 ATCTCCGTTGGGAGATTTGATGATATACGATGACCCGCTTACTTACTTCTA 549

RESULT 6  
US-09-193-562D-31  
Sequence 31, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193,562D  
PRIOR FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 31  
LENGTH: 2970  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-31

Query Match 32.3%; Score 77.6; DB 4; Length 2970;  
Best Local Similarity 61.0%; Pred. No. 1.5e-16;  
Matches 144; Conservative 0; Mismatches 89; Indels 3; Gaps 1;

QY 1 AAAATGCTGATGTTCTGTTGCTGAGTCTACTCCTCCAGTAAATGAAACCTACACTG 60  
Db 428 AAAAGCAATGTCATGACTGATGATGATGATGATGATGATGATGATGATGATGATG 487  
QY 61 AGCAGATGGGCACTGTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 120  
Db 488 TACATACAGAGGGGTGTGAAAAAGGAAAAATACATTCATTTACACCTAATTTCTAC 547  
QY 121 CAGGAAAAAGTT--AGCTGAATATGACACACAGTAGGCAATTTGTCATGAGTGG 177  
Db 548 TGAATGATTAAGTACAGCTGCGTACGATCAGACGAGCGGAGTGTGTCATGAAAGGG 607  
178 CTATCTAGATGGGAGATTTGACGAGTACATTAATGATGAGAAATTTCTACTTA 233  
608 CCCACCTCCGTTGGGGTGTGTTGATGATGATATACATGACAAACCTTTCTACATA 663

RESULT 7  
US-08-169-927-1  
Sequence 1, Application US/08169927  
Patent No. 5783441  
GENERAL INFORMATION:  
APPLICANT: Carl, Mitchell  
APPLICANT: Dodson, Michael E.  
APPLICANT: Ching, Wei Mei  
APPLICANT: Dasch, Gregory A.  
TITLE OF INVENTION: Gene and Protein Applicable to the  
TITLE OF INVENTION: Preparation of Vaccines for Rickettsia prowazekii and  
TITLE OF INVENTION: Rickettsia typhi and the Detection of Both  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Counsel, Naval Medical R & D Command  
STREET: Bldg. 1, T-12, 8901 Wisconsin Ave.  
CITY: Bethesda  
STATE: MD  
COUNTRY: USA  
ZIP: 20889-5606  
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/169,927  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/742,128  
FILING DATE: 08/09/91  
ATTORNEY/AGENT INFORMATION:  
NAME: Spevack, A. David  
REGISTRATION NUMBER: 24,743  
REFERENCE/DOCKET NUMBER: 75,976  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (301) 295-6759  
TELEFAX: (301) 295-1022  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5319 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: circular  
MOLECULE TYPE: DNA (genomic)  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: internal  
ORIGINAL SOURCE:  
ORGANISM: Rickettsia prowazekii  
STRAIN: Breinl  
FEATURE:  
NAME/KEY: -35\_signal  
LOCATION: 340..345  
FEATURE:  
NAME/KEY: -10\_signal  
LOCATION: 363..368  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 391..5226  
FEATURE:  
NAME/KEY: RBS  
LOCATION: 379..386  
NAME/KEY: stem\_loop  
LOCATION: 5270..5306  
PUBLICATION INFORMATION:  
AUTHORS: Carl, M.  
AUTHORS: Dodson, M. E.  
AUTHORS: Ching, W. M.  
AUTHORS: Dasch, G. A.  
TITLE: Characterization of the gene encoding the  
TITLE: protective S-layer protein of Rickettsia  
TITLE: prowazekii; presence of a truncated identical  
TITLE: homolog in rickettsia typhi  
JOURNAL: Proc. Natl. Acad. Sci. U.S.A.  
DATE: 1990  
RELEVANT RESIDUES IN SEQ ID NO: 1: FROM 1 TO 5319  
US-08-169-927-1

Query Match 14.2%; Score 34; DB 1; Length 5319;  
Best Local Similarity 51.3%; Pred. No. 0.077;  
Matches 79; Conservative 0; Mismatches 75; Indels 0; Gaps 0;

QY 3 AATGCTGATGTTCTGTTGCTGAGTCTACTCCTCCAGTAAATGAAACCTACACTGAG 62  
Db 1810 AATAATATCTCTTCGACGCTGTTCTATTCAGTTAGATGAGAGTCTATATAATACCGGT 1869  
QY 63 CAGATGGCAACTGTGGAG 122  
Db 1870 GATATAGTAAAGGTGTGTTAATGATGCGCTTACAAACATTAATTAAGTAAAGATGCT 1929  
QY 123 GGAATAAGTTAGCTGAATATGACACAGGTA 156

Db 1930 TCAAAATATTTAGCAGTGGCGCAATATTA 1963

RESULT 8  
US-08-916-576B-3

Sequence 3, Application US/08916576B  
Patent No. 6171816  
GENERAL INFORMATION:  
APPLICANT: YU, GUO-LIANG  
APPLICANT: DILLON, PATRICK J.  
APPLICANT: EBER, REINHARD  
APPLICANT: ENDRESS, GREGORY A.  
TITLE OF INVENTION: NOVEL HUMAN GROWTH FACTORS  
NUMBER OF SEQUENCES: 45  
CORRESPONDENCE ADDRESS:  
ADDRESS: STERN, KESSLER, GOLDSTEIN & FOX, P.L.L.C.  
STREET: 1100 NEW YORK AVENUE, SUITE 600  
CITY: WASHINGTON  
STATE: DC  
COUNTRY: US  
ZIP: 20005-3934  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/916,576B  
FILING DATE:  
CLASSIFICATION: 536  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 60/024,347  
FILING DATE: 23-AUG-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: STEFFE, ERIC K.  
REGISTRATION NUMBER: 36,688  
REFERENCE/DOCKET NUMBER: 1488.0500001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 371-2600  
TELEFAX: (202) 371-2540  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1423 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 88..603  
FEATURE:  
NAME/KEY: mat\_peptide  
LOCATION: 157..603  
FEATURE:  
NAME/KEY: sig\_peptide  
LOCATION: 88..156  
US-08-916-576B-3  
Query Match 13.5%; Score 32.4; DB 4; Length 1423;  
Best Local Similarity 47.9%; Pred. No. 0.16;  
Matches 93; Conservative 0; Mismatches 101; Indels 0; Gaps 0;

Db 405 CCCGACGGGGTTATATCCAGAACTTTTCTGATCCCACTGAGTGCATCC 464  
QY 227 CTACTTATCCATG 240  
Db 465 TGAATCATCAATG 478

RESULT 9  
US-09-103-840A-2

Sequence 2, Application US/09103840A  
Patent No. 6294328  
GENERAL INFORMATION:  
APPLICANT: FLEISCHMAN, Robert D.  
APPLICANT: WHITE, Owen R.  
APPLICANT: FRASER, Claire M.  
APPLICANT: VENTER, John C.  
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
FILE REFERENCE: 24366-20007.00  
CURRENT APPLICATION NUMBER: US/09/103,840A  
CURRENT FILING DATE: 1998-06-24  
NUMBER OF SEQ ID NOS: 2  
SOFTWARE: Patentin Ver. 2.1  
SEQ ID NO 2  
LENGTH: 4403765  
TYPE: DNA  
ORGANISM: Mycobacterium tuberculosis  
FEATURE:  
OTHER INFORMATION: CDC 1551  
OTHER INFORMATION: "n" bases at various positions throughout the sequence  
US-09-103-840A-2

Query Match 12.8%; Score 30.6; DB 4; Length 4403765;  
Best Local Similarity 53.8%; Pred. No. 13;  
Matches 63; Conservative 0; Mismatches 54; Indels 0; Gaps 0;

QY 35 TCCAGTAATGATGAACTTACATGAGATGGGCAACTGTGAGAGAGAGTGAAG 94  
Db 421794 TTCGGGCGAAGAGTAACTGACACGCGGCGATCGATCCCGAGCGGTGAAGT 421853  
QY 95 GATCCACCTCCTCCTGATTTGATGAGAAAAAGTGAATGAGACACA 151  
Db 421854 GCGGACGTCCTCCGCGACATGCGGAGAGGAGCGCTGCGGATGCGGCGCA 421910

## RESULT 10

US-09-103-840A-1  
Sequence 1, Application US/09103840A  
Patent No. 6294328  
GENERAL INFORMATION:  
APPLICANT: FLEISCHMAN, Robert D.  
APPLICANT: WHITE, Owen R.  
APPLICANT: FRASER, Claire M.  
APPLICANT: VENTER, John C.  
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM  
FILE REFERENCE: 24366-20007.00  
CURRENT APPLICATION NUMBER: US/09/103,840A  
CURRENT FILING DATE: 1998-06-24  
NUMBER OF SEQ ID NOS: 2  
SOFTWARE: Patentin Ver. 2.1  
SEQ ID NO 1  
LENGTH: 4411529  
TYPE: DNA  
ORGANISM: Mycobacterium tuberculosis  
OTHER INFORMATION: H37Rv  
US-09-103-840A-1

Query Match 12.8%; Score 30.6; DB 4; Length 4411529;  
Best Local Similarity 53.8%; Pred. No. 13;  
Matches 63; Conservative 0; Mismatches 54; Indels 0; Gaps 0;



## RESULT 12

APPLICANT: GEORGE P. VIASUK; PATRICK ERIC

```

? TITLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT
? TITLE OF INVENTION: PROTEIN
? NUMBER OF SEQUENCES: 357
? CORRESPONDENCE ADDRESS:
? ADDRESSEE: Lyon & Lyon
? STREET: 633 West Fifth Street
? STREET: Suite 4700
? CITY: Los Angeles
? STATE: California
? COUNTRY: U.S.A.
? ZIP: 90071
? COMPUTER READABLE FORM:
? MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
? MEDIUM TYPE: storage
? COMPUTER: IBM compatible
? OPERATING SYSTEM: IBM P.C. DOS 5.0
? SOFTWARE: word Perfect 5.1
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/08/486,397
? FILING DATE: June 5, 1995
? CLASSIFICATION: 530
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: 08/326,110
? FILING DATE: October 18, 1994
? ATTORNEY/AGENT INFORMATION:
? NAME: BIGGS, SUZANNE L.
? REGISTRATION NUMBER: 30,158
? REFERENCE/DOCKET NUMBER: 213/269
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (213) 489-1600
? TELEFAX: (213) 955-0440
? TEXEL: 67-3510
? INFORMATION FOR SEQ ID NO: 12:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 396 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: single
? TOPOLOGY: linear
? ORIGINAL SOURCE:
? ORGANISM: Ancylostoma duodenale
? FEATURE:
? NAME/KEY: Coding Sequence
? LOCATION: 10...237
? US-08-486-397-12
?
? Query Match 12.5%; Score 30; DB 2; Length 396;
? Best Local Similarity 54.5%; Pred. No. 0.61;
? Matches 60; Conservative 0; Mismatches 50; Indels 0; Gaps 0;
?
? Oy 20 TCTGTAAGTCTACTCTCCAGGTAATGATGACACCTTACACTGACGAGATGGCAACTGTG 79
? 11 1111 11 111111 1111 1111 1111111111
? Db 123 TGAAGAGTCGCGTTGGGTATGCAATGACGATTATACAGACAGATTGGGCACTGTGT 182
?
? Oy 80 AGAGAAGGTGAAGAGATCCACCTCCCTGATTTTCATTGCGAGGAAAA 129
? 11 1111 111111 11 111111 1111 1111 1111
? Db 183 TGAAGAGAGATGCAACGATATGAGATTTACTTTTGGACACAGAAA 232
?
? RESULT 15
? US-08-486-399-12
? Sequence 12, Application US/08486399
? Patent No. 5866543
? GENERAL INFORMATION:
? APPLICANT: George P. Vlasuk, Patric H. Stanssens,
? APPLICANT: Joris H.L. Mensens, Marc J. Lauwereys,
? APPLICANT: Yves R. Laroche, Laurent S. Jespers,
? APPLICANT: Yannick G.J. Ganssemaus, Matthew Moyle,
? APPLICANT: Peter W. Bergum
? TITLE OF INVENTION: NEMATODE-EXTRACTED ANTICOAGULANT
? TITLE OF INVENTION: PROTEIN
? NUMBER OF SEQUENCES: 356
? CORRESPONDENCE ADDRESS:
? ADDRESSEE: Lyon & Lyon
?

```

Tue Oct 22 11:22:29 2002

us-09-049-696-3.rni

Page 7

STREET: 633 West Fifth Street  
STREET: Suite 4700  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90071  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
MEDIUM TYPE: Storage  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: IBM P.C. DOS 5.0  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/486,399  
FILING DATE: June 5, 1995  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/326,110  
FILING DATE: October 18, 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: BIGGS, SUZANNE L.  
REGISTRATION NUMBER: 30,158  
REFERENCE/DOCKET NUMBER: 213/270  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-5310  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 396 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
ORGANISM: Ancylostoma duodenale  
FEATURE:  
NAME/KEY: Coding Sequence  
LOCATION: 10...237  
US-08-486-399-12

Query Match	12.5%	Score 30;	DB 2;	Length 396;
Best Local Similarity	54.5%;	Pred. No. 0.61;		
Matches	60;	Conservative	0;	Mismatches 50;
			Indels	0;
			Gaps	0;
Oy	20	TGCTGAGCTCACTCCCTCCAGGTAATGATGAACCCACACTGACAGATGGGCAACTGG	79	
Pb	123	TGACAGATGCCGCTTGCGATGTGCATGACAGCGGATTAATACAGACGAAGTTGGCAACTGT	182	
	80	AGAGAGGGGTGAAGGATTCACACCTCACTCCCTGATTTATTCAGAGGAAAA	129	
Db	183	TGAAAAAGACGATCCAAACGATATGAGAGATTATCTTTTGGACCCAGAA	232	

Search completed: October 17, 2002, 11:12:57  
Job time : 1912.65 secs

***This Page Blank (uspto)***

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 6.74118 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-3  
Perfect score: 442  
Sequence: 1 AAATGCTGATGTTCTGCTT.....GAATCTACTATTCATG 240

Scoring table:  
BLOSUM62  
Xgapop 10.0, Ygapext 0.5  
Xgapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

Searched: 231628 seqs, 24425594 residues  
Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame\_n2p\_model -DEV=xlh  
-O=/cgn2\_1/USPTO.spool/US09049696/runat\_16102002\_115821\_24739/app\_query.fasta\_1.13694  
-DB=Issued\_Patents\_AA -OPMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi  
-LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000  
-USER=US09049696\_ECGN\_1\_1\_57\_etunat\_16102002\_115821\_24739 -NCEU=6 -ICPU=3  
-NO\_XLPHY -NO\_MMAR -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG -DEV.TIMEOUT=120  
-WARN.TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6 -Fgapext=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

Issued\_Patents\_AA:  
1: /cgn2\_6/ptodata/2/iaa/5A.COMB.pep:\*  
2: /cgn2\_6/ptodata/2/iaa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/iaa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/iaa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/iaa/PCUS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/iaa/Backfilltest.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	439	99.3	914	4	US-09-193-562D-28
2	265	60.0	903	4	US-09-193-562D-46
3	265	60.0	1000	4	US-09-193-562D-30
4	255	57.7	342	4	US-09-193-562D-13
5	255	57.7	795	4	US-09-193-562D-11
6	255	57.7	821	4	US-09-193-562D-12
7	255	57.7	902	4	US-09-193-562D-34
8	255	57.7	905	4	US-09-193-562D-2
9	239.5	54.2	943	4	US-09-193-562D-32
c 10	61	13.7	171	5	PCT-US93-02475-12
11	60	13.6	451	1	US-08-453-117-2
12	60	13.6	451	2	US-08-948-222-2

13	60	13.6	451	2	US-08-973-145-2	Sequence 2, Appli
14	60	13.6	451	4	US-09-276-400-10	Sequence 10, Appl
15	60	13.6	451	4	US-09-448-076-10	Sequence 10, Appl
16	60	13.6	451	5	PCT-US96-08081-2	Sequence 2, Appli
17	60	13.6	5588	4	US-09-036-987A-6	Sequence 6, Appli
18	60	13.6	5588	4	US-09-370-700-6	Sequence 6, Appli
19	59.5	13.5	617	4	US-08-314-242-2	Sequence 2, Appli
20	59	13.3	857	1	US-08-022-835-4	Sequence 2, Appli
21	59	13.3	857	1	US-08-388-809-4	Sequence 4, Appli
22	59	13.3	857	2	US-08-647-714-4	Sequence 4, Appli
23	59	13.3	1833	3	US-08-479-722B-2	Sequence 2, Appli
24	59	13.3	1833	5	PCT-US95-02251-18	Sequence 18, Appl
25	58	13.1	267	4	US-08-965-056-15	Sequence 15, Appl
26	58	13.1	582	3	US-09-034-177-1	Sequence 3, Appli
27	58	13.1	856	1	US-08-022-835-2	Sequence 2, Appli
28	58	13.1	856	1	US-08-388-809-2	Sequence 2, Appli
29	58	13.1	856	1	US-08-375-100-1	Sequence 1, Appli
30	58	13.1	856	2	US-08-647-714-2	Sequence 2, Appli
31	58	13.1	856	4	US-07-956-483-11	Sequence 11, Appl
32	58	13.1	993	1	US-08-468-557-2	Sequence 1, Appli
33	56.5	12.8	271	2	US-08-872-961A-4	Sequence 4, Appli
34	56.5	12.8	271	3	US-09-231-258-4	Sequence 4, Appli
35	56.5	12.8	323	1	US-07-992-827D-1	Sequence 1, Appli
36	56.5	12.8	323	1	US-08-216-593-1	Sequence 1, Appli
37	56.5	12.8	323	5	PCT-US93-12380-1	Sequence 1, Appli
38	56.5	12.8	431	1	US-08-391-339-18	Sequence 18, Appl
39	56.5	12.8	431	1	US-08-484-274A-18	Sequence 18, Appl
40	56.5	12.8	510	1	US-08-484-493-11	Sequence 11, Appl
41	56.5	12.8	510	1	US-08-484-494-11	Sequence 11, Appl
42	56.5	12.8	510	2	US-08-345-212-11	Sequence 11, Appl
43	56.5	12.8	510	4	US-09-249-003-11	Sequence 4, Appli
44	56.5	12.8	679	2	US-08-462-481-4	Sequence 4, Appli
45	56.5	12.8	679	2	US-08-436-771-6	Sequence 6, Appli

#### ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
; Sequence 28, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193.562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065.922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO: 28  
; LENGTH: 914  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-28  
  
Alignment Scores:  
Pred. No.: 8.37e-51  
Score: 439.00  
Percent Similarity: 100.00%  
Best Local Similarity: 98.73%  
Query Match: 99.32%  
DB: 4  
Gaps: 0  
Indels: 0  
Matches: 78  
Conservative: 1  
Mismatch: 0  
Length: 914  
US-09-049-696-3 (1-240) x US-09-193-562D-28 (1-914)  
QY 3 AATGCTGATGTTCTGCTGAGCTCTCTCCAGTATGATGAACCTACACTGAG 62  
|||||  
Db 101 AsnAlaAspValLeuValAlaGluSerThrProProGlyAsnAspGluProGlyThrGlu 120  
|||||  
QY 63 CAGATGGCACTGTGGAGAGAGGAGGTAAGAGATCCACCTCCTGATTCATTCGA 122  
|||||

```

Db      121  glnmetgIyAsnCysgIygluIySgIygluIyrgIleHisIeulrInPrOAspPheIleHa 140
Qy      123  GGAAGAAAAAGTACGTGAATATATGACACACAGTAGGCGATTTCATGAGTGGGCTCAT 182
          |||||||
Db      141  gIyIySlySlySeuAlaIagIuTyTgIyProGIuIySaIaPheVAlHisGIuTrpAlaHis 160
Qy      183  CTACGATGGGAGATATTGACGACAGTACAAATATGATGAGAAATCTACTATTCGAAT 239
          |||||||
Db      161  LeuArIgrIpGLyValPheAspCpIuTyTrAsnSAsnSgIuTySphetyLeuSerAsn 179

RESULT 2
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OR INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 19611.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-
; US-09-193-562D-46

```

```

Assignment: DCC0013.
Pred. No.: 2.51e-27
Score: 265.00
Percent Similarity: 72.73%
Best local Similarity: 59.74%
Query Match: 59.95%
DB: 4
Gaps: 0

US-09-049-696-3 (1-240) x US-09-193-562D-46 (1-903)

QY      6  GCTGATGTTCTGGTTGCTGCAGACTACTCTCCAGATATGATGAAACCTACACTGAGCAG 65
      |||:::||||:::|||||  |||:::|||||||  |||
Db      101 AlagluvailllevalAlaAsnProTyrLeuLysHISglYaspaSPProTyrThrLeuGln 120
      |||
QY      66  ATGGCGCAACTGTGAGAGAGAAAGGCTGAAAGATCCACCTGCATCTGATTATTCAGAGA 125
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db      121 TyrGlyArgGCSglYgluLysGlygluInTyrIleHISpHeThrProAsnPhelLeuThr 140
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
QY      126  AAAAAGTTAGCTGATATATGACACCAAGGTAGGGCAATTGTCTCATGAGTGGGCTCATCTA 185
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db      141 AsnaSnLeuProIleTyrGlySerArgGlyIArgAlaPhelValHISgluThrPAlaHISLeu 160
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
QY      186  CGATGGGGAGATATTGACGAGATACAAATATATGATGAAATTCCTACTATCC 236
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db      161 ArgTrpGlyIlePheAspGluTyrAsnGluYaspaGlnProPheTyrIleSer 177
      |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||

RESULT 3
US-09-193-562D-30
: Sequence 30, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: PRIORITY FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17

```

[illegible]

```

RESULT 4
US-09-193-562D-13
; Sequence 13: Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065, 922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 13
; LENGTH: 342
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-13

Alignment Scores:
Pred. No.:
Score: 4.08e-26 Length: 342
Percent Similarity: 255.00 Matches: 45
Best Local Similarity: 70.13% Conservative: 9
Mismatch: 58.44% Mismatches: 23
Query Match: 57.69% Indels: 0
Deletions: 4 Gaps: 0

US-09-049-696-3 (1-240) x US-09-193-562D-13 (1-342)

OY 6 GCGATGTTCTGGTTGCTGCACTACTACCTCAGTATGATGACCTTACACTGACGAC 65
|||||.....|
Db 101 AlasapallilevalaiaaasProtYrleuStyrIleuStyrIleuSpaspsProtYrIleuGln 120
|||||.....|

OY 66 ATGGCAACCTGTGGAGGAAGCGGGAAGGATCCACCTCCTCTGATTTCATTTCGACGA 125
|||||.....|
Db 121 TyrIleuArGysGslYgIuLysGlyLysTyrIleuHisPheThrProAsnPhleuLeuThr 140
|||||.....|

```

```

OY 126 AAAAGTGAAGCTGAATTTGGACCAAGGATGGGCAATTTGGCATGGTGGGCTATCC 185
      ||||| ..... ||||| ||||| ||||| ||||| ||||| ||||| |||||
DB 141 AAsnAsnPhenHisIleTyrGlySerArgGlyArgValAlaHisGluTrpAlaHisLeu 160
OY 186 CGATGGGAGATATTGGACGAGTACCAATTAATGATGAGAAATTTACTATATCC 236
      ||||| ..... ||||| ||||| ||||| ||||| ||||| ||||| |||||
DB 161 ArgTrpGlyIlePheAspGluTyrAsnValAspIleProPheTyrIleSer 177

RESULT 5
US-09-193-562D-11
: Sequence 11, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 11
: LENGTH: 795
: TYPE: PRT
: ORGANISM: Unknown
: FEATURE:
: OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

Alignment Scores:
Pred. No.: 5.39e-26 Length: 795
Score: 255.00 Matches: 45
Percent Similarity: 70.13% Conservative: 9
Best Local Similarity: 58.44% Mismatches: 23
Query Match: 57.69% Indels: 0
DB: 4 Gaps: 0

US-09-049-696-3 (1-240) x US-09-193-562D-11 (1-795)
OY 6 GCTGATGTCGTTGGTGGTGAATCTACGCTCCACGATGAGAACCTCAGTACGACG 65
      ||||| ..... ||||| ||||| ||||| ||||| ||||| ||||| |||||
DB 101 AAspValIleValAlaAsnProTyrLeuLysTyrGlyAspSprProTyrThrLeuGln 120
OY 66 ATGGGCAACTGTGGAGAGAAAGGTGAAGGATCCACCTCATCTGATTCATTGACAGA 125
      ||| ||||| ..... ||||| ||||| ||||| ||||| ||||| |||||
DB 121 TyrGlyArgGlySgIuGlyLysGlyLysTyrIleHisPheThrProAsnPheLeuThr 140
      ||| ||||| ..... ||||| ||||| ||||| ||||| ||||| |||||
OY 126 AAAAAGTTAGCTGAATATGACACCAAGAGTGGGCAATTTGTCATGATGAGTGGCTATCA 185
      ||||| ..... ||||| ||||| ||||| ||||| ||||| ||||| |||||
DB 141 AAsnAsnPhenHisIleTyrGlySerArgGlyArgValAlaHisGluTrpAlaHisLeu 160
OY 186 CGATGGGAGATATTGGACGAGTACCAATTAATGATGAGAAATTTACTATATCC 236
      ||||| ..... ||||| ||||| ||||| ||||| ||||| ||||| |||||
DB 161 ArgTrpGlyIlePheAspGluTyrAsnValAspIleProPheTyrIleSer 177

RESULT 6
US-09-193-562D-12
: Sequence 12, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 12
: LENGTH: 821
: TYPE: PRT

```

```

; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-12

Alignment Scores:
Pred. No.: 5,45e-26      Length: 821
Score: 255.00           Matches: 45
Percent Similarity: 70.13%      Conservative: 9
Best Local Similarity: 58.44%    Mismatches: 23
Query Match: 57.69%            Indels: 0
DB: 4                      Gaps: 0

US-09-049-696-3 (1-240) x US-09-193-562D-12 (1-821)
QY 6 GCTGATGTTCTGGTTCGTGAGTCTACTCTCCAGGTAATGATGAACCTTACTGAGCAG 65
   |||||.....:|||||:      ||||:|||||||  ||
DB 101 ALaasPValIleValAlaasPProHIsleuclnHIsGlyasPspRProTyrlHleuGln 120
   |||||.....:|||||:      ||||:|||||||  ||

QY 66 ATGGCAACTGTGGAGAGAAAGGATGCACTCACTCTGTGATTCATTGCGAGA 125
   |||  |||||.....:|||||:      |||||  |||||.....:|||||:
DB 121 TyrgIaYgScgIyGulYgSlYlYsTyrIleHIsPheHrProAsnPheuleuThr 140
   |||  |||||.....:|||||:      |||||  |||||.....:|||||:

QY 126 AAAAGTAGCTGAATATGAGCAACAAGTAGGCGCATTTGTCATGAGTGGGCATCTA 185
   |||||  .....:|||||  |||||  |||||.....:|||||  |||||
DB 141 AsnaSPheHIsIleTyGlySerArgGlyArgValaPheValHIsGluTrpAlaHIsLeu 160
   |||||.....:|||||  |||||  |||||.....:|||||  |||||

QY 186 CGATGGGAGTATTTGACGATACAAATATGATGAGAATTTCTACTATCC 236
   |||||.....:|||||  |||||  |||||.....:|||||  |||||
DB 161 ArgTrpGlyIlePheAspGluTyTrAsnValAspInProPheTyrlIleSer 177

RESULT 7
US-09-193-562D-34
; Sequence 34, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 34
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.: 5,62e-26      Length: 902
Score: 255.00           Matches: 45
Percent Similarity: 71.43%      Conservative: 10
Best Local Similarity: 58.44%    Mismatches: 22
Query Match: 57.69%            Indels: 0
DB: 4                      Gaps: 0

US-09-049-696-3 (1-240) x US-09-193-562D-34 (1-902)
QY 6 GCTGATGTTCTGGTTCGTGAGTCTACTCTCCAGGTAATGATGAACCTTACTGAGCAG 65
   |||||.....:|||||:      ||||:|||||||  ||
DB 101 ALaasPValIleValAlaasPProHIsleuclnHIsGlyasPspRProTyrlHleuGln 120
   |||||.....:|||||:      ||||:|||||||  ||

QY 66 ATGGCAACTGTGGAGAGAAAGGATGCACTCACTCTGTGATTCATTGCGAGA 125
   |||  |||||.....:|||||:      |||||  |||||.....:|||||:
DB 121 TyrgIaYgScgIyAsPargGlyGlnTyTrIleHIsPheHrProAsnPheuleuThr 140
   |||  |||||.....:|||||:      |||||  |||||.....:|||||:

QY 126 AAAAGTAGCTGAATATGAGCAACAAGTAGGCGCATTTGTCATGAGTGGGCATCTA 185
   |||||  .....:|||||  |||||  |||||.....:|||||  |||||
DB 141 AsnaSPheHIsIleTyrgIyProArgGlyArgValaPheValHIsGluTrpAlaHIsLeu 160
   |||||.....:|||||  |||||  |||||.....:|||||  |||||

```

OY 186 CGATGGGAGTATTGACGAGTACAAATATGATGAGAAATTCCTACTATCC 236  
 |||||  
 DB 161 AyrtrpglylPheaspplutyrAsnValasparsProtyrIleSer 177

## RESULT 8

US-09-193-562D-2  
 ; Sequence 2, Application US/09193562D  
 ; Patent No. 6309857  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Pauli, Benedicht U.  
 ; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 ; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules  
 ; FILE REFERENCE: 18617.0052  
 ; CURRENT FILING DATE: 1998-11-17  
 ; PRIOR APPLICATION NUMBER: US/60/065,922  
 ; PRIOR FILING DATE: 1997-11-17  
 ; NUMBER OF SEQ ID NOS: 47  
 ; SEQ ID NO 2  
 ; LENGTH: 905  
 ; TYPE: PRT  
 ; ORGANISM: Unknown  
 ; FEATURE:  
 ; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells.  
 US-09-193-562D-2

Alignment Scores:  
 Pred. No.: 5,63e-26 Length: 905  
 Score: 255.00 Matches: 45  
 Percent Similarity: 70.13% Conservative: 9  
 Best Local Similarity: 58.44% Mismatches: 23  
 Query Match: 57.69% Indels: 0  
 DB: 4 Gaps: 0

US-09-049-696-3 (1-240) x US-09-193-562D-2 (1-905)  
 OY 6 GCTGATGTTGCTGCTGAGTACTCTCCAGGTAATGATGAAACCTTCACTGAGCAG 65  
 |||||  
 DB 101 AlaspvAlIleValAlaAsnProtyrLeuIlyrGlyspasprotyrIleuGln 120  
 OY 66 ATGGGCACTGTGAGAGAAAGGTGAAGAGTCCACTCTCTCTGATTCATTCGACGA 125  
 |||||  
 DB 121 TyrcIyArGcysglIyGlyIyLysTyrlIleHisPheThrProAsnPheLeuThr 140  
 OY 126 AAAAAGTTAGTGAATATGACGAGTACAAATATGATGAGAAATTCCTACTATCC 185  
 |||||  
 DB 141 AsnAsnPheHisIleTyrcIySerArgGlyArgValPheValHisGluTrpAlaHisLeu 160

## RESULT 9

US-09-193-562D-32  
 ; Sequence 32, Application US/09193562D  
 ; Patent No. 6309857  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Pauli, Benedicht U.  
 ; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 ; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules  
 ; FILE REFERENCE: 18617.0052  
 ; CURRENT FILING DATE: 1998-11-17  
 ; PRIOR APPLICATION NUMBER: US/60/065,922  
 ; PRIOR FILING DATE: 1997-11-17  
 ; NUMBER OF SEQ ID NOS: 47  
 ; SEQ ID NO 32  
 ; LENGTH: 943  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-193-562D-32

Alignment Scores:

Pred. No.: 7.04e-24 Length: 943  
 Score: 239.50 Matches: 43  
 Percent Similarity: 71.79% Conservative: 13  
 Best Local Similarity: 55.13% Mismatches: 21  
 Query Match: 54.19% Indels: 1  
 DB: 4 Gaps: 1

US-09-049-696-3 (1-240) x US-09-193-562D-32 (1-943)

OY 6 GCTGATGTTGCTGCTGAGTACTCTCCAGGTAATGATGAAACCTTCACTGAGCAG 65  
 |||||  
 DB 109 AlaspvAlIleValAlaAsnProtyrLeuIlyrGlyspasprotyrIleuGln 128  
 OY 66 ATGGGCACTGTGAGAGAAAGGTGAAGAGTCCACTCTCTGATTCATTCGACGA 125  
 |||||  
 DB 129 TyrcIyArGcysglIyGlyIyLysTyrlIleHisPheThrProAsnPheLeuThr 148  
 OY 126 AAAAAGTTA---GCTGATATGACGACCAAGGTAGGCGATTGTCCATGAGTGCATAT 182  
 |||||  
 DB 149 AsnAsnLeuThrAlaGlyTyrcIySerArgGlyArgValPheValHisGluTrpAlaHis 168  
 OY 183 CTACGATGGGAGTATTGACGAGTACAAATATGATGAGAAATTCCTACTATCC 236  
 |||||  
 DB 169 LeuAyrtrpglylPheaspplutyrAsnValasparsProtyrIleSer 186

## RESULT 10

PCT-US93-02475-12  
 ; Sequence 12, Application PC/RUS9302475  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Winkleski, Bernadine J.  
 ; TITLE OF INVENTION: Tumor Necrosis Factor with Modified  
 ; TITLE OF INVENTION: Ion Channel  
 ; NUMBER OF SEQUENCES: 13  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Donald G. Lewis  
 ; STREET: 8328 Regents Road #1E  
 ; CITY: San Diego  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 92122  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Diskette, 3.5 inch, 1.44 M storage  
 ; COMPUTER: VE System 386  
 ; OPERATING SYSTEM: MS-DOS 5  
 ; SOFTWARE: Word Perfect  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: PCT/US93/02475  
 ; FILING DATE: 19930412  
 ; CLASSIFICATION:  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/852,625  
 ; FILING DATE: 12 March 1992  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Donald G. Lewis  
 ; REGISTRATION NUMBER: 28636  
 ; REFERENCE/DOCKET NUMBER: BJW-2  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (619) 554-2421  
 ; TELEFAX: (619) 554-6312  
 ; INFORMATION FOR SEQ ID NO: 12:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 171 amino acids  
 ; TYPE: AMINO ACIDS  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; FEATURE:  
 ; NAME/KEY: Lymphotoxin (rabbit)  
 ; OTHER INFORMATION: Two blank residues designated by  
 ; OTHER INFORMATION: "Xaa" are inserted after residue No. 34 and No. 61  
 ; OTHER INFORMATION: of murine lymphotoxin and the sequence numbering is  
 ; OTHER INFORMATION: augmented by 1 starting with residue No. 35 and  
 ; OTHER INFORMATION: again augmented by 1 starting with residue No. 62  
 ; OTHER INFORMATION: in order to maximize the sequence homology with



```

NAME: Jervis, Herbert H.
REGISTRATION NUMBER: 31,111
REFERENCE/DOCKET NUMBER: SBC-P50338
TELECOMMUNICATION INFORMATION:
TELEPHONE: (610) 270-5019
TELEFAX: (610) 270-5090
INFORMATION FOR SEQ. ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 451 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-453-117-2

Alignment Scores:
Pred. No.: 9.19 Length: 451
Score: 60.00 Matches: 25
Percent Similarity: 45.33% Conservative: 9
Best Local Similarity: 33.33% Mismatches: 28
Query Match: 13.57% Indels: 13
Gaps: 6

US-09-049-696-3 (1-240) x US-08-453-117-2 (1-451)
QY 36 CCAGGTAAATGATGAAACCTGACCTAGCAGCATGGCGCAATCTGGAGAGAGCGTGAAGC 95
Db 326 ProGlyGlnSerGlyPro-----LysGlyGlnGlySerGlyGlyGlySerGly 344
QY 96 ATCCACGCACTGCTGATTCATTCATGCAAGAAAAGTTAGCTGAATGTGACCA---CAA 152
Db 342 AsnThrLeuThrPro--PheThrLysValAlaGlyLeuValAlaGlyLysSerGlyProHisGlu 360
QY 153 GGTAGGGCA---TTTGTCAT-----GAGTGGGCTCATCTA-----CGATGGGGA 194
Db 361 GlyArgValAlaGluIleLeuHisSerCylGlnIleProGlyThrIleCysAspArgTyrGlu 380
QY 195 GTATTGACGAGTACAATATGATGAGAAATTTACTTATCCA 237
Db 380 uValArgValGlyGlnValAlaCysArgSerLeuGlyTyrPro 394

RESULT 12
US-08-948-222-2
: Sequence 2, Application US/08948222
: Patent No. 5863798
: GENERAL INFORMATION:
: APPLICANT: Lysko, Paul G.
: APPLICANT: Elshourbagy, Nabih A.
: APPLICANT: Brawner, Mary E.
: TITLE OF INVENTION: Attachment Enhanced 293 Cells
: NUMBER OF SEQUENCES: 4
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: SmithKline Beecham - Corporate Patents
: ADDRESSEE: U.S.
: STREET: Mailcode - UW2220, 709 Swedeland Road
: CITY: King of Prussia
: STATE: Pennsylvania
: COUNTRY: U.S.A.
: ZIP: 19406-5090
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/948,222
: FILING DATE:
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US/08/453,117
: FILING DATE:
: ATTORNEY/AGENT INFORMATION:
: NAME: Jervis, Herbert H.
: REGISTRATION NUMBER: 31,111

```



Qy 195 GTATTGACGAGTACATATGATGAGAAATTCTACTATCA 237  
 | ::::: |||  
 Db 380 uValArgValGlyGlnValValCysArgSerLeuGlyTyrPro 394

RESULT 15  
US-09-448-076-10

; Sequence 10, Application US/09448076  
; Patent No. 6300092

; GENERAL INFORMATION:

APPLICANT: Khodadoust, Mehran et al  
TITLE OF INVENTION: METHODS OF USE

FILE REFERENCE: MNT-073CP

FILE REFERENCE: MNI-0/3CP  
CURRENT APPLICATION NUMBER: US/09/448,076

;; CURRENT FILING DATE: 1999-11-23

EARLIER APPLICATION NUMBER: 60/

EARLIER FILING DATE: 1999-01-27

EARLIER APPLICATION NUMBER: 09/

EARLIER FILING DATE: 1999-03-25

NUMBER OF SEQ ID NOS: 12  
SOFTWARE: PatentIn Ver

SOFTWARE: PatentIn Ver. 2.0  
 SEQ ID NO 10

SEQ ID NO 10  
LENGTH: 45

TYPE: PRT

ORGANISM: 1

US-09-448-076-10

2000

Alignment Scores:

Pred. No.:	9.19	Length:	451
Score:	60.00	Matches:	25

score:	60.00	Matches:	25
Percent Similarity:	45.338	Conservative:	9

Percent Similarity:	40.33%
Best Local Similarity:	33.33%
Mismatches:	28
Conservative:	9

Query Match:	13.578	Indels:	13
--------------	--------	---------	----

DB:	4	Gaps:	6
-----	---	-------	---

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
84

US-09-049-696-3 (1-240) x US-09-448-076-10 (1-451)

36 CCAGGTAATGATGAACCTTACACTGAGCAGATGGGCACTGTGAGAGAGAGGTGAAGC 95

Db 326 ProGlyAsnSerGlyPro-----LysGlyGlnLysGlyGlnLysGlySerGly 341

96 ATCCACCTCACTCCTGATTTCATTCGAGGAAAAAGTTAGCTGAATATGGACCA---CAA 152

Db 342 AsnThrLeuThrPro---PheThrLysValArgLeuValGlyGlySerGlyProHisGlu 360

Search completed: October 17, 2002, 17:59:12  
Job time : 9.74118 secs

11115 Page Blank (uspio)

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 9.08025 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-6

Perfect score: 252

Sequence: 1 CAAGAATTTGTGTTAGT.....GAGGACGTGTCGACG 252

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_NA:\*  
1: /cgn2\_6/plodata/2/ina/5A.COMB.seq:\*  
2: /cgn2\_6/plodata/2/ina/5B.COMB.seq:\*  
3: /cgn2\_6/plodata/2/ina/6A.COMB.seq:\*  
4: /cgn2\_6/plodata/2/ina/6B.COMB.seq:\*  
5: /cgn2\_6/plodata/2/ina/PCROS.COMB.seq:\*  
6: /cgn2\_6/plodata/2/ina/Backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	252	100.0	3007	4	US-09-193-562D-27
2	109	43.3	3022	4	US-09-193-562D-33
3	105.4	41.8	3418	4	US-09-193-562D-29
4	103.8	41.2	3317	4	US-09-193-562D-31
5	53.8	21.3	2970	4	US-09-193-562D-31
6	30.8	12.2	1455	1	US-08-832-883-58
7	30.8	12.2	1455	2	US-08-832-883-58
8	30.4	12.1	2047	4	US-09-345-468-1
9	28.2	11.2	3283	4	US-09-061-709-8
10	28.2	11.2	3412	4	US-09-061-709-6
11	28.2	11.2	3581	2	US-08-738-349-1
12	28.2	11.2	40352	3	US-08-846-111D-15
13	27.8	11.0	4138	1	US-08-447-411-75
14	27.8	11.0	4138	2	US-08-662-227-33
15	27.8	11.0	4138	4	US-09-017-947-33
16	27.8	11.0	5211	1	US-08-447-411-1
17	27.8	11.0	5924	1	US-08-447-411-44
18	27.8	11.0	5948	2	US-08-662-227-1
19	27.8	11.0	5948	4	US-09-017-947-1
20	27.6	11.0	343	4	US-08-905-223-169
21	27.6	11.0	2010	4	US-09-247-155-151
22	27.6	11.0	2990	1	US-08-572-951-1
23	27.6	11.0	8655	3	US-09-075-272-1
24	27.4	10.9	1130	1	US-07-864-004B-1
25	27.4	10.9	1130	1	US-08-251-937A-1
26	27.4	10.9	1130	1	US-08-212-133A-5
27	27.4	10.9	1130	1	US-08-474-503-3

28	27.4	10.9	1130	2	US-08-670-707A-3	Sequence 3, Appl1
29	27.4	10.9	1130	4	US-09-037-601-3	Sequence 3, Appl1
30	27.4	10.9	1130	5	PCR-US93-03275-1	Sequence 1, Appl1
31	27.4	10.9	1130	5	PCR-US94-13200-3	Sequence 3, Appl1
32	27.4	10.9	1623	1	US-08-121-202-3	Sequence 3, Appl1
33	27.4	10.9	4334	2	US-08-670-707A-38	Sequence 38, Appl1
34	27.4	10.9	4334	4	US-09-037-601-38	Sequence 38, Appl1
35	27.4	10.9	4700	4	US-09-150-460B-9	Sequence 9, Appl1
36	27.4	10.9	6402	2	US-08-670-707A-36	Sequence 36, Appl1
37	27.4	10.9	6402	4	US-09-037-601-36	Sequence 36, Appl1
38	27.4	10.9	262	1	US-08-222-177A-46	Sequence 46, Appl1
39	26.8	10.6	479	4	US-08-927-219-134	Sequence 134, Appl1
40	26.8	10.6	4138	1	US-08-323-474-1	Sequence 1, Appl1
41	26.8	10.6	4138	5	PCR-US93-06093-1	Sequence 1, Appl1
42	26.8	10.6	4905	1	US-07-978-895-3	Sequence 3, Appl1
43	26.8	10.6	4905	1	US-08-473-119-3	Sequence 3, Appl1
44	26.8	10.6	4905	2	US-08-475-352-3	Sequence 3, Appl1
45	26.8	10.6	4975	4	US-09-630-706-3	Sequence 3, Appl1

## ALIGNMENTS

RESULT 1	US-09-193-562D-27	Sequence 27, Application US/09193562D
;	Patent No. 6309857	
;	GENERAL INFORMATION:	
;	APPLICANT: Pauli, Benedicht U.	
;	TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium	
;	TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules	
;	FILE REFERENCE: 18617.0052	
;	CURRENT APPLICATION NUMBER: US/09/193,562D	
;	CURRENT FILING DATE: 1998-11-17	
;	PRIOR APPLICATION NUMBER: US/60/065,922	
;	PRIOR FILING DATE: 1997-11-17	
;	NUMBER OF SEQ ID NOS: 47	
;	SEQ ID NO 27	
;	LENGTH: 3007	
;	TYPE: DNA	
;	ORGANISM: Homo sapiens	
;	US-09-193-562D-27	
Query Match	100.0%; Score 252; DB 4; Length 3007;	
Best Local Similarity	100.0%; Pred. No. 4; Be-76;	
Matches 252; Conservative	0; Mismatches 0; Indels 0; Gaps 0;	
QY	1 CAAGAATTTGTGTTAGTCTTGACAAATCTGGAAGCATGCGACTGTAACCGCTC	60
DB	956 CAAGAATTTGTGTTAGTCTTGACAAATCTGGAAGCATGCGACTGTAACCGCTC	1015
QY	61 AATGCACTGAATCAAGCAGCCAGCTTTCTGCTGACAGCTGAGCTGGGCTCTGG	120
DB	1016 AATGCACTGAATCAAGCAGCCAGCTTTCTGCTGACAGCTGAGCTGGGCTCTGG	1075
QY	121 GTTGGATGTGATTCGATTCGAGGTCGATTCGATTCGATTCGATTCGATTCGATTCG	180
DB	1076 GTTGGATGTGATTCGATTCGAGGTCGATTCGATTCGATTCGATTCGATTCGATTCG	1135
QY	181 AGTGGAGTATGACAGGAGCAGTCCAAAGATTAACCTGACAGCTTCAGAGGAGAGC	240
DB	1136 AGTGGAGTATGACAGGAGCAGTCCAAAGATTAACCTGACAGCTTCAGAGGAGAGC	1195
QY	241 TCCATCTGCAGC 252	
DB	1196 TCCATCTGCAGC 1207	
RESULT 2	US-09-193-562D-33	
;	Sequence 33, Application US/09193562D	
;	Patent No. 6309857	
;	GENERAL INFORMATION:	

```
APPLICANT: Pauli, Benedicht U.
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
FILE REFERENCE: 18617.0052
CURRENT APPLICATION NUMBER: US/09/193,562D
CURRENT FILING DATE: 1998-11-17
PRIORITY FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 33
LENGTH: 3022
TYPE: DNA
ORGANISM: Mus musculus
US-09-193-562D-33
```

```
Query Match          43.3%; Score 109; DB 4; Length 3022;
Best Local Similarity 65.3%; Pred. No. 2,1e-27;
Matches 160; Conservative 0; Mismatches 85; Indels 0; Gaps 0;
```

```
QY 5 GAATGTGTGTAGTCTTGTGACAAATCTGAGACGATGGGACGTGTAAACCGCTCAATC 64
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 937 GAGTGTGTGTCTGTCTGTGATTAATCTGAGACATGACAAAGAACCGCTTATTC 996
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 997 GAATGAATCAAGCAGCAGCACTGACTTAATCTCAAAATTTGGAAGAGTCTATGTTG 1056
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 125 GGATGTGATTTGACAGTCTGCCCATGTACAAAGTGAATCATACATTAACAGTG 184
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1057 GATTAGTCACTTTGACAGCGCTGCCACATCCAAATTTATTAATAAATAACAGTA 1116
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 185 GCACTGACAGGACACACTGCCCAAAAGATTACTGACAGCCTTCAGAGGAGCGTCCA 244
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1117 GTACTGACTACCAAAAGATACCGCAAACTCCCAACAGGCTTGTGTGTAATTCAA 1176
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 245 TCTGC 249
    |||||
Db 1177 TTTC 1181
```

```
RESULT 3
US-09-193-562D-29
; Sequence 29, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIORITY FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 29
; LENGTH: 3418
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-193-562D-29
```

```
Query Match          41.8%; Score 105.4; DB 4; Length 3418;
Best Local Similarity 63.7%; Pred. No. 3.8e-26;
Matches 160; Conservative 0; Mismatches 91; Indels 0; Gaps 0;
```

```
QY 1 CAAGAATTGTGTGTACTCTTGACAAATCTGAGACATGGGCACTGGTAACCGCTC 60
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 931 CACGGGTAGTCTGTGTGACTTGATAAATCTGAGACATGATGAGAACCGCTC 990
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 61 AATGACTGATTAAGCAGCGCACTTTCTGCTGACAGCAGTTGAGTGGGCTCTG 120
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 991 TTTCGATGATTAAGCAGCGCACTTTGATGATTAATTTGAAAGGATCTTG 1050
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 121 GTTGGATGTGATTTGACAGTGTGCTGCCCATGTACAAAGTGAATCATACAGTAAC 180
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
```

```
Db 1051 GTTGGGTGTGACATTTGACAGTCTTCTTAATAATCCAAAGTAACCTATATAAATATT 1110
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 181 AGTGCAGTGCAGGACGACACTGCCCAAAAGATTACTGACAGCCTTCAGAGGAGC 240
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1111 GATGATTAACCTTACCAAAAGATCACTGCAAACTGCTCAAGAGCTGATGTGGCACT 1170
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 241 TCCATCTGCAG 251
    |||||
Db 1171 TCAATTTGTCAG 1181
```

```
RESULT 4
US-09-193-562D-1
; Sequence 1, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIORITY FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 1
; LENGTH: 3317
; TYPE: DNA
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated
; protein from bovine endothelial cells
US-09-193-562D-1
```

```
Query Match          41.2%; Score 103.8; DB 4; Length 3317;
Best Local Similarity 63.3%; Pred. No. 1.3e-25;
Matches 159; Conservative 0; Mismatches 92; Indels 0; Gaps 0;
```

```
QY 1 CAAGAATTGTGTGTAGTCTTGACAAATCTGAGACATGGGCACTGGTAACCGCTC 60
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 981 CAGCGGTAGTCTTGTGTGACTTGATTAATCTGAGACATGTGCGAAGACCGCTC 1040
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 61 AATGACTGATTAAGCAGCGCACTTTCTGCTGACAGCAGTTGAGTGGGCTCTG 120
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1041 TTTCAAATGATTAAGCAGCGCACTTACTGATTAAGTTATTTGAAAGGATCTTTA 1100
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 121 GTTGGATGTGATTTGACAGTCTGCCCATGTACAAAGTGAATCATACATTAAC 180
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1101 GTTGGATGTGATTTGACAGTCTGCCCATGTACAAAGTGAATCATACATTAAC 1160
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 181 AGTGCAGTGCAGGACGACACTGCCCAAAAGATTACTGACAGCCTTCAGAGGAGC 240
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 1161 GATGATTAATTTTACCAAAAGATCACTGCAAACTGCTCAAGTAGTATGTGGAAT 1220
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 241 TCCATCTGCAG 251
    |||||
Db 1221 TCAATTTGTCAG 1231
```

```
RESULT 5
US-09-193-562D-31
; Sequence 31, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIORITY FILING DATE: 1997-11-17
```

NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 31  
LENGTH: 2970  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-31

Query Match  
Best Local Similarity 51.0%; Score 53.8; DB 4; Length 2970;  
Pred. No. 1.3e-08;  
Matches 127; Conservative 0; Mismatches 122; Indels 0; Gaps 0;

QY 2 AAGACATGCTGCTTGAATGCTTGAACAAAGTGAAGCAGCGAGCTGTAACCGCTCA 61  
Db 1034 ACAAGTGTCTGTTAGTGTGCTGATGCTCCACCAAGATGACAGAGCTGACAGACTCC 1093  
QY 62 ATGACATGACAGAGCGGCGGCGGCTTCCGCTGACAGAGCTGAGCTGGGGCTCGG 121  
Db 1094 TTCAACTACACAAAGCGGAGAAATTTTATTTGATGACAGATTGTAATTCATCCTTCG 1153  
QY 122 TTGGGATGTCACATTTGACAGCTGCTCCCATGTACAAAGTGAATCATACATTAACA 181  
Db 1154 TTGGCATTTGCGAGTTTGACAGCAAGAGATCAGAGCCGACCTACACCAATTACA 1213  
QY 182 GTGGCAGTGAAGGAGACACCTGCCAAAGATTACCTGACAGCTTCAGAGAGGAGCT 241  
Db 1214 GCAATGATGATCGAAAGTGTCTGTTTCATATCTGCCACCATGTATACACTAAACAG 1273  
QY 242 CCATCTGCA 250  
Db 1274 ACATCAGCA 1282

## RESULT 6

US-08-832-883-58  
Sequence 58, Application US/08832883  
Patent No. 5807681  
GENERAL INFORMATION:  
APPLICANT: Giordano, Antonio  
TITLE OF INVENTION: METHODS FOR THE DIAGNOSIS AND PROGNOSIS  
TITLE OF INVENTION: OF CANCER  
NUMBER OF SEQUENCES: 115  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SEIDEL, GONDA, LAVORGNA & MONACO, P.C.  
STREET: Suite 1800 Two Penn Center Plaza  
CITY: Philadelphia  
STATE: PA  
COUNTRY: USA  
ZIP: 19102  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/832,883  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Monaco, Daniel A  
REGISTRATION NUMBER: 30,480  
REFERENCE/DOCKET NUMBER: 8321-13 US1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (215) 568-8383  
TELEFAX: (215) 568-5549  
INFORMATION FOR SEQ ID NO: 58:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1455 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-832-883-58

Query Match  
Best Local Similarity 12.2%; Score 30.8; DB 1; Length 1455;  
Pred. No. 0.6;  
Matches 56; Conservative 0; Mismatches 42; Indels 0; Gaps 0;

QY 88 TTCCTGCTGACAGAGTTGACCTGGGGCTCTGGGTTGGAGTGTGACATTTGACAGTCT 147  
Db 501 TTGAGGGTTTGGAGGAGACATACACCTTAAGTAAGTAGTGTGACCTGTACATTTCA 560  
QY 148 GCCCATGTACAAAGTGAATCATCATACATTAACAGTGG 185  
Db 561 CCCCATGTCAAAAGAGAAACGATCATATATTTGTGG 598

## RESULT 7

US-08-832-877-58  
Sequence 58, Application US/08832877  
Patent No. 5840506  
GENERAL INFORMATION:  
APPLICANT: Giordano, Antonio  
TITLE OF INVENTION: METHODS FOR THE DIAGNOSIS AND PROGNOSIS OF  
TITLE OF INVENTION: CANCER  
NUMBER OF SEQUENCES: 116  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SEIDEL, GONDA, LAVORGNA & MONACO, P.C.  
STREET: Suite 1800 Two Penn Center Plaza  
CITY: Philadelphia  
STATE: PA  
COUNTRY: USA  
ZIP: 19102  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/832,877  
FILING DATE:  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Monaco, Daniel A  
REGISTRATION NUMBER: 30,480  
REFERENCE/DOCKET NUMBER: 8321-13 US2  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (215) 568-8383  
TELEFAX: (215) 568-5549  
INFORMATION FOR SEQ ID NO: 58:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1455 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-832-877-58  
Query Match  
Best Local Similarity 12.2%; Score 30.8; DB 2; Length 1455;  
Pred. No. 0.6;  
Matches 56; Conservative 0; Mismatches 42; Indels 0; Gaps 0;

QY 88 TTCCTGCTGACAGAGTTGACCTGGGGCTCTGGGTTGGAGTGTGACATTTGACAGTCT 147  
Db 501 TTGAGGGTTTGGAGGAGACATACACCTTAAGTAAGTAGTGTGACCTGTACATTTCA 560  
QY 148 GCCCATGTACAAAGTGAATCATCATACATTAACAGTGG 185  
Db 561 CCCCATGTCAAAAGAGAAACGATCATATATTTGTGG 598

RESULT 8  
US-09-345-468-1/c  
Sequence 1, Application US/09345468  
Patent No. 6245527  
GENERAL INFORMATION:

APPLICANT: Busfield, S.  
APPLICANT: Villevall, J.  
APPLICANT: Jandrot-Perrus, M.  
APPLICANT: Valchenker, W.  
TITLE OF INVENTION: GLYCOPROTEIN VI AND USES THEREOF  
FILE REFERENCE: 7853-147  
CURRENT APPLICATION NUMBER: US/09/345,468  
CURRENT FILING DATE: 1999-06-30  
NUMBER OF SEQ ID NOS: 24  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 1  
LENGTH: 2047  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-345-468-1

Query Match 12.1%; Score 30.4; DB 4; Length 2047;  
Best Local Similarity 54.5%; Pred. No. 0.97; Mismatches 51; Indels 0; Gaps 0;  
Matches 61; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

125 GGATGGTGACATTTGACAGTGTGCTGCCCATGTACAAAGTGAATCATACAGATTAACAGTGTG 184  
1299 GGATGGGTCTCCACAGATTCCTTCATCCCAANTGGAGGTGCCCTCAGACAGAGAGGC 1240  
OY 185 GCAGTGACAGGAGACACTGCCCAAAGATTACCTGCAGCAGCTTCAGAGG 236  
DB 1239 AGACAGACAGACAGACACTGCGCCGAGCGCTCCTGATGTAACACAGAGAGG 1188

RESULT 9  
US-09-061-709-8  
Sequence 8, Application US/09061709B  
Patent No. 6297364  
GENERAL INFORMATION:  
APPLICANT: Chen, Yao-Tseng  
APPLICANT: Gure, Ali  
APPLICANT: Tsang, Solam  
APPLICANT: Stockert, Elisabeth  
APPLICANT: Jager, Elke  
APPLICANT: Knuth, Alexander  
APPLICANT: Old, Lloyd J.  
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Encoding Cancer Associated  
FILE REFERENCE: LUD 5538  
CURRENT APPLICATION NUMBER: US/09/061,709B  
CURRENT FILING DATE: 1998-04-17  
NUMBER OF SEQ ID NOS: 8  
SEQ ID NO 8  
LENGTH: 3283  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
US-09-061-709-8

Query Match 11.2%; Score 28.2; DB 4; Length 3283;  
Best Local Similarity 59.3%; Pred. No. 6.8; Mismatches 33; Indels 0; Gaps 0;  
Matches 48; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

OY 133 ACATTGACAGTGTGCTGCCCATGTACAAAGTGAATCATACAGATTAACAGTGTGAC 192  
DB 381 ATATGGGACAGTGTGGAATGTGGAACAGTCAACACAGACACAGAAACGCCGTTGTCAA 440  
OY 193 AGGACACACTCGCCAAAGA 213  
DB 441 CGTCACATATGCACACAAGA 461

RESULT 10  
US-09-061-709-6  
Sequence 6, Application US/09061709B  
Patent No. 6297364  
GENERAL INFORMATION:  
APPLICANT: Chen, Yao-Tseng

APPLICANT: Gure, Ali  
APPLICANT: Tsang, Solam  
APPLICANT: Stockert, Elisabeth  
APPLICANT: Jager, Elke  
APPLICANT: Knuth, Alexander  
APPLICANT: Old, Lloyd J.  
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Encoding Cancer Associated  
FILE REFERENCE: LUD 5538  
CURRENT APPLICATION NUMBER: US/09/061,709B  
CURRENT FILING DATE: 1998-04-17  
NUMBER OF SEQ ID NOS: 8  
SEQ ID NO 6  
LENGTH: 3412  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
US-09-061-709-6

Query Match 11.2%; Score 28.2; DB 4; Length 3412;  
Best Local Similarity 59.3%; Pred. No. 6.9; Mismatches 33; Indels 0; Gaps 0;  
Matches 48; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

OY 133 ACATTGACAGTGTGCTGCCCATGTACAAAGTGAATCATACAGATTAACAGTGTGAC 192  
DB 381 ATATGGGACAGTGTGGAATGTGGAACAGTCAACACAGACACAGAAACGCCGTTGTCAA 440

OY 193 AGGACACACTCGCCAAAGA 213  
DB 441 CGTCACATATGCACACAAGA 461

RESULT 11  
US-08-738-349-1  
Sequence 1, Application US/08738349  
Patent No. 5869638  
GENERAL INFORMATION:  
APPLICANT: Takeshita, Sunao  
APPLICANT: Okazaki, Makoto  
APPLICANT: Kawai, Shinji  
APPLICANT: Tsujimura, Atsushi  
APPLICANT: Amano, Egon  
TITLE OF INVENTION: Bone-Related Cadherin-Like Protein and  
TITLE OF INVENTION: Process for Its Production.  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Finnegan, Henderson, Farbow, Garrett &  
ADDRESS: Dunnet  
STREET: 1300 I Street, N.W.  
CITY: Washington  
STATE: D.C.  
COUNTRY: USA  
ZIP: 20005-3315  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/738,349  
FILING DATE: 25-OCT-1996  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/364,439  
FILING DATE:  
APPLICATION NUMBER: US 08/112,061  
FILING DATE: 26-AUG-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Barker, M. P.  
REGISTRATION NUMBER: 32,013  
REFERENCE/DOCKET NUMBER: 02481.1323-00000  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-408-4000



OY 102 AGTTGAGCTGGGGTTCCTGGATTGGATGTGCATTTGACAGTGCTGCCATGTACAAG 161  
|| || | || || || || || || || || || || || || || || || || || || || || || ||  
Db 755 AGGGGATCCAGGTGCTTGGATTGGTCTTGTGGCTGTGGCAAAAGCAGAATATGTTCCA 814

```

Oy      162 TGAACCTATACAGATAAACAGTGGCAGTGCACAGGACACACTGCCAAAG 212
      ||| ||| | | | | | | | | | | | | | | | | | | |
Db      815 TGATTAATATATAGATTAGCCAAAGCTAAGATATGCGACACAAATGAAAAGAG 865

```

RESULT 14  
US-08-662-227-33  
Sequence 33, Application US/08662227  
Patent No. 592320  
GENERAL INFORMATION:  
APPLICANT: VOGEL, CARL-WITHELM  
APPLICANT: BREDEHORST, REINHORST  
APPLICANT: KOCK, MICHAEL  
APPLICANT: FRITZINGER, DAVID  
TITLE OF INVENTION: RECOMBINANT PROCVF  
NUMBER OF SEQUENCES: 39  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: OBLON, SPIVAK, MCLELLAND, MATER & NEUSTADT,  
ADDRESS: P. C.  
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA

```

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/662,227
FILING DATE: 14-JUN-1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: OELON, NORMAN F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 1126-0107-0X
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-413-3000
TELEFAX: 703-413-2220
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 4138 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
US-08-662-227-33

```

RESULT 15  
 US-09-017-947-33  
 : Sequence 33, Application US/09017947  
 : Patent No. 6303754  
 :  
 : GENERAL INFORMATION:  
 :  
 : APPLICANT: VOCEL, CARL-WILHELM  
 :  
 : APPLICANT: BREDEHORST, REINHORST  
 :  
 : APPLICANT: KOCK, MICHAEL  
 :  
 : APPLICANT: FRITZINGER, DAVID  
 :  
 : TITLE OF INVENTION: RECOMBINANT PROCYAN-  
 :  
 : NUMBER OF SEQUENCES: 39

CORRESPONDENCE ADDRESS:  
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,  
ADDRESSEE: P.C.  
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA  
ZIP: 22202  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC Compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/017,947  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/662,227  
FILING DATE: 14-JUN-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: OBLON, NORMAN F.  
REGISTRATION NUMBER: 24,618  
REFERENCE/DOCKET NUMBER: 1126-0107-0X  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-413-3000  
TELEFAX: 703-413-2220  
INFORMATION FOR SEQ. ID NO.: 33:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 4138 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA

```

Query Match      11.0%; Score 27.8; DB 4; Length 418;
Best Local Similarity 53.2%; Pred. No. 10;
Matches 59; Conservative 0; Mismatches 52; Indels 0; Gaps 0

QY 102 AGTTAGCTGGGCGCTCGGTTGGATGTGACATTTCACAGTGTGCCATGTACAAG 161
   || || || || || || || || || || || || || || || || || || || ||
DB 755 AGGGGATCCACAGTGCTGTTGGATTGCTTTGTGTGCTGTGGACCAAGACAGAAATGTTCTCAA 814

QY 162 TGAACCTCATACAGATTAACAGTGGCAGTACACAGGACACATCCGCCCAAAAG 212
   || || || || || || || || || || || || || || || || || || || ||
DB 815 TGATAAATATATAGATTAGCCCAAGCTAAGATATGTGGACACAAATAGAAAAAG 865

Search completed: October 17, 2002, 11:13:33
Job time : 29.0802 secs

```

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus.n2p model

Run on: October 17, 2002, 10:27:54 : Search time 7.07824 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-6  
Perfect score: 455  
Sequence: 1 CAAGAAATGTGTGTACT.....GAGGACGTCATCTGCAGC 252

Scoring table:  
BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 segs, 24425594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODE=frame+ n2p model  
-Q=/cgn2\_1/USPTO.spool/US0904696/ra1.16102002\_115821\_24739/app.query.fasta\_1.13694  
-DB=Issued\_Patents\_AA-QFMT=fastan-SUFFIX=ra1-MINMATCH=0.1-LOOPL=0  
-LOOPEXT=0-ONITS=bits-START=1-END=1-MATRIX=blomsun62-TRANS=human40.cdi  
-LIST=45-DOCALLIGN=200-THR\_SCORE=pcr-THR\_MAX=100-THR\_MIN=0-ALIGN=15  
-MODE=LOCAL-OUTFMT=ptc-NCORE=ext-HEAPSIZE=500-MINLEN=0-MAXLEN=200000000  
-USPR=US0904696.qcgn1.1.57.qraut.16102002\_115821\_24739-NCPU=6-ICPU=3  
-NO\_XLPXY-NO\_MAP-LARGEQUERY-NEG\_SCORES=0-WAIT-LONGLOG-DEFTIMEOUT=120  
-WARN\_TIMEOUT=30-THREADS=1-XGAPOP=10-XGAPEXT=0.5-FGAPOP=6-FGAPEXT=7  
-YGAPOP=10-YGAPEXT=0.5-DELOP=6-DELEXT=7

Database :

- 1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep.\*
- 2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep.\*
- 3: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep.\*
- 4: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep.\*
- 5: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep.\*
- 6: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	418	91.9	914	4	US-09-193-562D-28
2	248	54.5	902	4	US-09-193-562D-34
3	236	51.9	903	4	US-09-193-562D-46
4	233	51.2	795	4	US-09-193-562D-11
5	233	51.2	821	4	US-09-193-562D-12
6	233	51.2	905	4	US-09-193-562D-2
7	231	50.8	1000	4	US-09-193-562D-30
8	186	40.9	943	4	US-09-193-562D-32
9	186	40.9	943	4	US-09-188-930-305
10	69	15.2	342	4	US-09-193-562D-13
11	66.5	14.6	1333	1	US-08-447-411-76
12	66.5	14.6	1333	2	US-08-662-227-34

13	66.5	14.6	1333	4	US-09-017-947-34	Sequence 34, Appl
14	66.5	14.6	1611	2	US-08-804-227C-5	Sequence 5, Appl1
15	66.5	14.6	3729	2	US-08-804-227C-4	Sequence 4, Appl1
16	66.5	14.6	4472	2	US-08-804-227C-2	Sequence 2, Appl1
17	63	13.8	251	4	US-08-944-483-47	Sequence 47, Appl
18	63	13.8	933	4	US-08-764-870-14	Sequence 14, Appl
19	63	13.8	933	4	US-08-980-115-14	Sequence 14, Appl
20	62.5	13.7	393	4	US-08-977-554-2	Sequence 2, Appl1
21	62.5	13.7	393	4	US-09-325-697-2	Sequence 2, Appl1
22	62.5	13.7	393	4	US-09-227-806-2	Sequence 2, Appl1
23	62	13.4	189	4	US-09-199-637E-95	Sequence 95, Appl
24	62	13.4	218	3	US-08-985-526-1	Sequence 1, Appl1
25	62	13.4	239	5	PCT-US93-01652-1	Sequence 1, Appl1
26	62	13.4	297	3	US-09-111-556A-5	Sequence 5, Appl1
27	62	13.4	287	3	US-08-360-758-5	Sequence 5, Appl1
28	62	13.4	392	6	5219753-2	Patent No. 5219753
29	62	13.4	1170	1	US-08-313-288B-20	Sequence 20, Appl
30	61.5	13.5	265	3	US-08-483-857-8	Sequence 8, Appl1
31	61.5	13.3	396	4	US-08-861-774E-90	Sequence 90, Appl
32	61.5	13.3	514	1	US-08-063-552-13	Sequence 13, Appl
33	61.5	13.3	514	5	PCT-US93-05704-13	Sequence 13, Appl
34	61.5	13.3	515	5	US-08-063-552-4	Sequence 4, Appl1
35	61.5	13.3	515	5	PCT-US93-05704-4	Sequence 4, Appl1
36	59.5	12.8	228	4	US-08-766-982-11	Sequence 11, Appl
37	59.5	12.8	228	4	US-08-944-483-55	Sequence 55, Appl
38	59.5	12.8	228	4	US-09-296-219-11	Sequence 11, Appl
39	59.5	12.8	711	1	US-08-184-012C-8	Sequence 8, Appl1
40	59.5	12.8	711	1	US-08-334-177-2	Sequence 2, Appl1
41	59.5	12.8	711	2	US-08-666-082B-1	Sequence 1, Appl1
42	59.5	12.8	711	2	US-08-766-982-2	Sequence 2, Appl1
43	59.5	12.8	711	4	US-09-296-219-2	Sequence 2, Appl1
44	59.5	12.8	711	5	PCT-US95-13830-2	Sequence 3, Appl1
45	59	12.7	441	3	US-08-985-526-3	Sequence 3, Appl1

#### ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
; Sequence 28, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193, 562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 28  
; LENGTH: 914  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-28

#### Alignment Scores:

Pred. No.: 3.18e-48 Length: 914  
Score: 418.00 Matches: 84  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 91.87% Indels: 0  
DB: 4 Gaps: 0

US-09-049-696-6 (1-252) x US-09-193-562D-28 (1-914)

QY 1 CAAGAAATGTGTGTAGTCCTTGAATCTGGAAGCACTGGTAACCGCTC 60  
Db 304 Glntrgllvalcysleuvalleuaspyserylsermetlatrhglsnaryleu 323  
QY 61 AATCGACTGAATCAAGCAGCCAGCTTCTCCTGTCAGACAGTGGAGCTGCTCG 120  
|||||

```
Db 324 AsnArgLeuAsnGlnAlaGlyLeuPheLeuLeuGlnThrValGluLeuGlySerTrp 343
QY 121 GTTGGATGTCATATTGACATGTCCTCCATGACAAAGTGAACCTATCAGATTAAAC 180
Db 344 ValGlyMetValThrPheAspSerAlaAlaHisValGlnSerGluLeuIleGlnIleAsn 363
QY 181 AGTGGCACTGACAGGAGCACACTGCCCAAAAGATTACTGCAGACGCTTCAGAGGAGCG 240
Db 364 SerGlySerAspArgAspThrLeuAlaIlyAsrLeuProAlaAlaIleAsrGlyGlyThr 383
QY 241 TCCATCTGCAGC 252
Db 384 SerIleCysSer 387

RESULT 2
US-09-193-562D-34
; Sequence 34, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 34
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.: 3.65e-25 Length: 902
Score: 248.00 Matches: 51
Percent Similarity: 74.70% Conservative: 11
Best Local Similarity: 61.45% Mismatches: 21
Query Match: 54.51% Indels: 0
Gaps: 0

US-09-049-696-6 (1-252) x US-09-193-562D-34 (1-902)
QY 1 CAAGAATTGTGTCTTTAGTCTTGACAAATCTGGAACATGCGACGTGAACCCGCTC 60
Db 306 ArgArgValValCysLeuValLeuAspIlySerMetAspLysGluAspArgLeu 325
QY 61 AATGCACCTGAATCAAGCAGCGCCAGCTTTCTGCTGCAGACAGCTTGAGCTGGGGTCTGG 120
Db 326 IleArgMetAsnGlnAlaAlaGluLeuValThrGlnIleValGluLysGluSerMet 345
QY 121 GTTGGATGTCATATTGACATGTCCTCCATGACAAAGTGAACCTATCAGATTAAAC 180
Db 346 ValGlyMetValThrPheAspSerAlaAlaHisValGlnSerGluLeuIleGlnIleThr 365
QY 181 AGTGGCACTGACAGGAGCACACTGCCCAAAAGATTACTGCAGACGCTTCAGAGGAGCG 240
Db 366 SerSerSerAspTyrGlnIlySerIleThrAlaAsnLeuProGlnAlaIleSerGlyGlyThr 385
QY 241 TCCATCTGC 249
Db 386 SerIleCys 388

RESULT 3
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
```

```
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-
US-09-193-562D-46

Alignment Scores:
Pred. No.: 1.55e-23 Length: 903
Score: 236.00 Matches: 46
Percent Similarity: 74.70% Conservative: 16
Best Local Similarity: 55.42% Mismatches: 21
Query Match: 51.87% Indels: 0
Gaps: 0

US-09-049-696-6 (1-252) x US-09-193-562D-46 (1-903)
QY 1 CAAGAATTGTGTCTTTAGTCTTGACAAATCTGGAACATGCGACGTGAACCCGCTC 60
Db 306 GlnArgValValCysLeuValLeuAspIlySerMetSerSerGluAspArgLeu 325
QY 61 AATGCACCTGAATCAAGCAGCGCCAGCTTTCTGCTGCAGACAGCTTGAGCTGGGGTCTGG 120
Db 326 PheArgMetAsnGlnAlaAlaGluLeuPheLeuIleGlnIleGluLysGlySerLeu 345
QY 121 GTTGGATGTCATATTGACATGTCCTCCATGACAAAGTGAACCTATCAGATTAAAC 180
Db 346 ValGlyMetValThrPheAspSerValAlaGluIleArgAsnAsnLeuThrIlySerThr 365
QY 181 AGTGGCACTGACAGGAGCACACTGCCCAAAAGATTACTGCAGACGCTTCAGAGGAGCG 240
Db 366 AspAspAsnValIlyGluAsnIleThrAlaAsnLeuProGlnAlaAsnGlyGlyThr 385
QY 241 TCCATCTGC 249
Db 386 SerIleCys 388

RESULT 4
US-09-193-562D-11
; Sequence 11, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 11
; LENGTH: 795
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

Alignment Scores:
Pred. No.: 3.79e-23 Length: 795
Score: 233.00 Matches: 45
Percent Similarity: 73.49% Conservative: 16
Best Local Similarity: 54.22% Mismatches: 22
Query Match: 51.21% Indels: 0
```

```

DB: 4 Gaps: 0
US-09-049-696-6 (1-252) x US-09-193-562D-11 (1-795)
QY 1 CAAGAATTGTGTTAGTCTTGACAATCTGGAAGCATGGCGACTGGTAACCGCTC 60
DB 307 GlnArgValAlaValcysLeuValIleuAspLysSerGlySerMetSerAlaGluAspArgLeu 326
QY 61 AATGCACTGATCAGACAGCAGCTTTCTGCTGCAGACAGTGTGAGTGGGGTCTGG 120
DB 327 PheGlnMetLcnsnGlnAlaAlaGluLeuTyrLeuIleGlnValIleGlnLysGlySerLeu 346
QY 121 GTTGGATGTGATTCATTGTGACAGTGTGCTCCATGTACAAAGTAACTATACAGATTAAC 180
DB 347 ValGlyMetValThrPheAspSerValAlaGluIleGlnAsnHisLeuThrArgGlyLeThr 366
QY 181 AGTGGCAGTACACAGGACACACTCGCCAAAGATTACCTGCAGCAGCTTGACAGAGGAGC 240
DB 367 AspAspAsnValTyrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlyGlyThr 386
241 TCCATCTGC 249
DB 387 SerIleCys 389

RESULT 5
US-09-193-562D-12
; Sequence 12, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 12
; LENGTH: 821
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-12

Alignment Scores:
d. No.: 3.83e-23 Length: 821
Score: 233.00 Matches: 45
Percent Similarity: 73.49% Conservative: 16
Best Local Similarity: 54.22% Mismatches: 22
Query Match: 51.21% Indels: 0
DB: 4 Gaps: 0

US-09-049-696-6 (1-252) x US-09-193-562D-12 (1-821)
QY 1 CAAGAATTGTGTTAGTCTTGACAATCTGGAAGCATGGCGACTGGTAACCGCTC 60
DB 307 GlnArgValAlaValcysLeuValIleuAspLysSerGlySerMetSerAlaGluAspArgLeu 326
QY 61 AATGCACTGATCAGACAGCAGCTTTCTGCTGCAGACAGTGTGAGTGGGGTCTGG 120
DB 327 PheGlnMetLcnsnGlnAlaAlaGluLeuTyrLeuIleGlnValIleGlnLysGlySerLeu 346
QY 121 GTTGGATGTGATTCATTGTGACAGTGTGCTCCATGTACAAAGTAACTATACAGATTAAC 180
DB 347 ValGlyMetValThrPheAspSerValAlaGluIleGlnAsnHisLeuThrArgGlyLeThr 366
QY 181 AGTGGCAGTACACAGGACACACTCGCCAAAGATTACCTGCAGCAGCTTGACAGAGGAGC 240
DB 367 AspAspAsnValTyrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlyGlyThr 386
241 TCCATCTGC 249
QY 241 TCCATCTGC 249

```

```

DB 387 SerIleCys 389

RESULT 6
US-09-193-562D-2
; Sequence 2, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 2
; LENGTH: 905
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells
US-09-193-562D-2

Alignment Scores:
d. No.: 3.95e-23 Length: 905
Score: 233.00 Matches: 45
Percent Similarity: 73.49% Conservative: 16
Best Local Similarity: 54.22% Mismatches: 22
Query Match: 51.21% Indels: 0
DB: 4 Gaps: 0

US-09-049-696-6 (1-252) x US-09-193-562D-2 (1-905)
QY 1 CAAGAATTGTGTTAGTCTTGACAATCTGGAAGCATGGCGACTGGTAACCGCTC 60
DB 307 GlnArgValAlaValcysLeuValIleuAspLysSerGlySerMetSerAlaGluAspArgLeu 326
QY 61 AATGCACTGATCAGACAGCAGCTTTCTGCTGCAGACAGTGTGAGTGGGGTCTGG 120
DB 327 PheGlnMetLcnsnGlnAlaAlaGluLeuTyrLeuIleGlnValIleGlnLysGlySerLeu 346
QY 121 GTTGGATGTGATTCATTGTGACAGTGTGCTCCATGTACAAAGTAACTATACAGATTAAC 180
DB 347 ValGlyMetValThrPheAspSerValAlaGluIleGlnAsnHisLeuThrArgGlyLeThr 366
QY 181 AGTGGCAGTACACAGGACACACTCGCCAAAGATTACCTGCAGCAGCTTGACAGAGGAGC 240
DB 367 AspAspAsnValTyrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlyGlyThr 386
QY 241 TCCATCTGC 249
DB 387 SerIleCys 389

RESULT 7
US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 30
; LENGTH: 1000
; TYPE: PRT
; ORGANISM: Homo sapiens

```

US-09-193-562D-30

Alignment Scores:

Pred. No.:	7,63e-23	Length:	1000
Score:	231.00	Matches:	47
Percent Similarity:	72.29%	Conservative:	13
Best Local Similarity:	56.63%	Mismatches:	23
Query Match:	50.77%	Indels:	0
DB:	4	Gaps:	0

US-09-049-696-6 (1-252) x US-09-193-562D-30 (1-1000)

OY 1 CAAGATTGCTGTTTGTCTTGCCTTGCACAAATCTGGAAGCATGGCGAGCATGTAACGGCTC 60  
|||||  
DB 305 GlnArgValAlaCysLeuValLeuAspLysSerLysSerMetAlaGluAspArgLeu 324  
OY 61 AATGACGATGCAAGCGAGCGCTTTCCTGCTGACAGACATGAGCTGGGGTCTCG 120  
|||||  
DB 325 PheArgMetAlaGlnAlaGlnLeuArgLeuLeuLeuLeuLeuLeuLeuLeuLeu 344  
OY 121 GTTGGGATGTGACATTTGACAGCTGCTCCCATGTACAAAGTCACTACATTAAC 180  
|||||  
DB 345 ValGlyLeuValThrPheAspSerPheAlaLysIleGlnSerLysLeuIleLysIle 364  
OY 181 AGTGCAGTGCAGGACACACTCGCCAAAGATTACCTGACAGACGCTTACAGAGGAGC 240  
|||||  
DB 365 AspAspAsnThrTyrGlnLysIleThrAlaAsnLeuProGlnGluAlaAspGlyThr 384  
OY 241 TCCATCTGC 249  
|||||  
DB 385 SerIleCys 387

RESULT 8

US-09-193-562D-32

; Sequence 32, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 32  
; LENGTH: 943  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-193-562D-32

Alignment Scores:

Pred. No.:	9,52e-17	Length:	943
Score:	186.00	Matches:	39
Percent Similarity:	64.71%	Conservative:	16
Best Local Similarity:	45.88%	Mismatches:	28
Query Match:	40.88%	Indels:	2
DB:	4	Gaps:	1

US-09-049-696-6 (1-252) x US-09-193-562D-32 (1-943)

OY 4 AGAATTGTGTAGTCTTGCCTTGCACAAATCTGGAAGCATGGCGAGCATGTAACGGCTC 63  
|||||  
DB 310 LysValValCysLeuValLeuValSerSerLysMetAlaGluAlaAspArgLeu 329  
OY 64 CGACTGATCAAGCAGCGCGCTTTCCTGCTGACAGACATGAGCTGGGGTCTCG 123  
|||||  
DB 330 GlnLeuGlnAlaAlaGlnPheTyrLeuMetGlnIleValGlnIleHsrThrPheVal 349  
OY 124 GGGATGTGACATTTGACAGCTGCTGCCCATGCAAAAGTCACTACATTAACAGT 183  
|||||  
DB 350 GlyIleLeuSerPheAspSerLysGlyGlnIleArgAlaGlnLeuHsrGlnIleAsnSer 369

OY 184 GCGAGTACAGGAGACACTCGCCAAAGATTACCTGACAGACTTCAGAGGAGC--- 240  
|||||

DB 370 AsnAspArgLysLeuLeuValSerTyrLeuProThrThrValSerAlaLysThrAsp 389

OY 241 ---TCCATCTGCAGC 252  
|||||

DB 390 IleSerIleCysSer 394

RESULT 9

US-09-188-930-305

; Sequence 305, Application US/09188930A  
; Patent No. 6150502  
; GENERAL INFORMATION:  
; APPLICANT: Watson, James D.  
; APPLICANT: Strachan, Lorna  
; APPLICANT: Sleeman, Matthew  
; APPLICANT: Onrust, Rene  
; APPLICANT: Murison, James Greg  
; TITLE OF INVENTION: Compositions Isolated From Skin Cells  
; FILE REFERENCE: 11000.1011c1  
; CURRENT APPLICATION NUMBER: US/09/188,930A  
; CURRENT FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 348  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 305  
; LENGTH: 649  
; TYPE: PRT  
; ORGANISM: Mouse  
US-09-188-930-305

Alignment Scores:

Pred. No.:	0.459	Length:	649
Score:	70.00	Matches:	22
Percent Similarity:	41.10%	Conservative:	8
Best Local Similarity:	30.14%	Mismatches:	29
Query Match:	15.09%	Indels:	14
DB:	4	Gaps:	3

US-09-049-696-6 (1-252) x US-09-188-930-305 (1-649)

OY 223 CCGAAGCTGCTGCGAGGAATCTTTGGCGAGTGTCTCCGTGCTGCTGCTGCTGCTTATC 174  
|||||  
DB 337 ProGlnLysValArgGly-----MetAlaIleLysAspLeuSerAlaGluLeuPheAsp 354  
OY 173 TGTATGACTTCACCTTGTGACATGGCGACACTGTCAATGTCAACATCCACCCAGAGC 114  
|||||  
DB 355 CysLysAspSer-----GlyIleValSerThrIleGlnIleThrAlaIle 370  
OY 113 CCCAGCTCAACTGTCTGCGACGAGAAAGCTGGCGCTGCTGATTCAGTCGATGAGCGG 54  
|||||  
DB 371 ProAsnThrAlaTyrProAlaGlnIleGlnIleThrProAla----- 383  
OY 53 TTACCACTCGCCATGCTTCCAGATTGTCAAGACATAA 15  
|||||  
DB 384 ---ProValThrLysGlnProAspIleLysAsnProLys 395

RESULT 10

US-09-193-562D-13

; Sequence 13, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 13



OY 109 CTGGGCTCTGGTGGATGTCACATTGACAGTCTGCCATGTACAAAGTGAATC 168  
Db 254 ProglyAlatrlplegylLeuValAlaValAspLysAlaGluTyrValLeuAsnAspLys 273  
OY 169 ATACAGATAACAGTGGCAGTGCACAGGACACTGCCCAA 210  
Db 274 TyrLysIleSerGlnAlaLysIleTrpAspThrIleGluLys 287

## RESULT 13

US-09-017-947-34  
Sequence 34, Application US/09017947  
Patent No. 6303754  
GENERAL INFORMATION:  
APPLICANT: VOGEL, CARL-WILHELM  
APPLICANT: BREDEHORST, REINHORST  
APPLICANT: KOCK, MICHAEL  
APPLICANT: FRITZINGER, DAVID  
TITLE OF INVENTION: RECOMBINANT PROCV  
NUMBER OF SEQUENCES: 39  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: OBLON, SPIVAK, MCLELLAND, WAIER & NEUSTADT,  
P.C.  
STREET: 1755 S. JEFFERSON DAVIS HIGHWAY  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA  
ZIP: 22202  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/017,947  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/662,227  
FILING DATE: 14-JUN-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: OBLON, NORMAN F.  
REGISTRATION NUMBER: 24,618  
REFERENCE/DOCKET NUMBER: 1126-0107-0X  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-413-3000  
TELEFAX: 703-413-2220  
INFORMATION FOR SEQ ID NO: 34:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1333 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-017-947-34

## Alignment Scores:

Pred. No.: 1.73 Length: 1333  
Score: 66.50 Matches: 15  
Percent Similarity: 53.70% Conservative: 14  
Best Local Similarity: 27.78% Mismatches: 24  
Query Match: 14.62% Indels: 1  
DB: 4 Gaps: 1

US-09-049-696-6 (1-252) x US-09-017-947-34 (1-1333)

OY 52 AACCGCTCATGCTGCAATCAAGCAGCGCAGCTTTCTGCTGAGACAGT---GAG 108  
Db 234 SetArGaspAsnArgIleGlnMetProGlyAlaAlaMetLysIleLysLeuGluGlyAsp 253  
OY 109 CTGGGCTCTGGTGGATGTCACATTGACAGTCTGCCATGTACAAAGTGAATC 168  
Db 254 ProglyAlatrlplegylLeuValAlaValAspLysAlaGluTyrValLeuAsnAspLys 273

OY 169 ATACAGATAACAGTGGCAGTGCACAGGACACTGCCCAA 210  
Db 274 TyrLysIleSerGlnAlaLysIleTrpAspThrIleGluLys 287

## RESULT 14

US-08-804-227C-5  
Sequence 5, Application US/08804227C  
Patent No. 5876991  
GENERAL INFORMATION:  
APPLICANT: Dehoff, Bradley S.  
APPLICANT: Kustoss, Stuart A.  
APPLICANT: Rostock, Paul R., Jr.  
APPLICANT: Sutton, Kimberly L.  
TITLE OF INVENTION: POLYKETIDE SYNTHASE GENES  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: THOMAS G. PLANT 1501  
STREET: LILLY CORPORATE CENTER  
CITY: INDIANAPOLIS  
STATE: IN  
COUNTRY: USA  
ZIP: 46285  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: ASCII(DOS) Text only  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/804,227C  
FILING DATE: February 21, 1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Plant, Thomas, G.  
REGISTRATION NUMBER: 35,784  
REFERENCE/DOCKET NUMBER: X-8231  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 317-276-2459  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1611 amino acids  
TYPE: amino acid  
TOPOLOGY: unknown  
MOLECULE TYPE: protein  
US-08-804-227C-5

## Alignment Scores:

Pred. No.: 1.84 Length: 1611  
Score: 66.50 Matches: 20  
Percent Similarity: 46.03% Conservative: 9  
Best Local Similarity: 31.75% Mismatches: 23  
Query Match: 14.62% Indels: 11  
DB: 2 Gaps: 2

US-09-049-696-6 (1-252) x US-08-804-227C-5 (1-1611)

OY 44 CGACTGTACCGCTCATGCTGCAATCAAGCAGCGCAGCTTTCTGCTGAGACAG 103  
Db 884 ArgLeuLeuThrSerThrAlaGlu-----AlaTrpAlaHisGlyAlaThr 898  
OY 104 TTGAGCTGGGCTCTGGTGGATGTCACATTGACAGTCTGCCATGTACAAAGTGA 163  
Db 899 LeuThrTrpAspProAlaLeuProGlyHisLeuThrThrLeuProThrProPhe 918  
OY 164 AACTCATACAGA-----TAAACAGTGCAGTGCACAGGACACTGC 205  
Db 919 AsnHisHisThrTyrTrpLeuAspThrThrProThrThrProAlaThrThrThGlnSer 938  
OY 206 CCANAAGAT 214  
Db 939 ProThrAsp 941  
RESULT 15



```

US-08-804-227C-4
; Sequence 4, Application US/08804227C
; Patent No. 5876991
; GENERAL INFORMATION:
; APPLICANT: Dehoff, Bradley S.
; APPLICANT: Kuhstoss, Stuart A.
; APPLICANT: Rostock, Paul R., Jr.
; APPLICANT: Sutton, Kimberly L.
; TITLE OF INVENTION: POLYKETIDE SYNTHASE GENES
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: THOMAS G. PLANT 1501
; STREET: LILLY CORPORATE CENTER
; CITY: INDIANAPOLIS
; STATE: IN
; COUNTRY: USA
; ZIP: 46285
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: MS-DOS
; SOFTWARE: ASCII(DOS) Text only
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/804,227C
; FILING DATE: February 21, 1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Plant, Thomas G.
; REGISTRATION NUMBER: 35,784
; REFERENCE/DOCKET NUMBER: X-8231
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 317-276-2459
; INFORMATION FOR SRO ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3729 amino acids
; TYPE: amino acid
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; US-08-804-227C-4

Alignment Scores:
Pred. No.: 2.42 Length: 3729
Score: 66.50 Matches: 20
Percent Similarity: 46.03% Conservative: 9
Best Local Similarity: 31.75% Mismatches: 23
Query Match: 14.62% Indels: 11
DB: 2 Gaps: 2

; -09-049-696-6 (1-252) x US-08-804-227C-4 (1-3729)
QY 44 CGACTGTAACCGGCTCAATGACTGATCAAGACGCGCACTTTCTGCTGCAGACAG 103
Db |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
890 ArgLeuLeuThrSerThrAlaGlu-----AlaTrpAlaHisGlyAlaThr 904
QY 104 TTGAGCTGGGGCTCTGGTGGTGGATGGATTTGACATTTGACAGTGCCTGCCATGACAAAGTG 163
Db |||:||||| ||| ||| ||||| ||| ||||| ||| ||||| |||
905 LeuThrTrpAspProAlaLeuProProGlyHisLeuThrThrLeuProThrTyTrpPhe 924
QY 164 AACTCATACAGAC-----TAAACAGTGGCAGTGACAGGACAGCACTCG 205
Db ||| :|| ||| ||| ||| ||| ||| ||| ||| ||| |||
925 AsnHisHisTyrTrpLeuAspThrThrProThrThrProAlaThrThrThrGlnSer 944
QY 206 CCAAAAGAT 214
Db ||| ||| |||
945 ProThrAsp 947

```

Search completed: October 17, 2002, 17:59:21  
Job time : 10.0782 secs

**This Page Blank (uspto)**

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 : Search time 7.9272 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-5  
Perfect score: 220  
Sequence: 1 CTATAGTGAATCTGTGACA.....GACAAATCTGAGAGCATGGC 220

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued\_Patents\_NA:\*  
1: /cgn2\_6/pdata/2/ina/5A.COMB.seq:\*  
2: /cgn2\_6/pdata/2/ina/5B.COMB.seq:\*  
3: /cgn2\_6/pdata/2/ina/6A.COMB.seq:\*  
4: /cgn2\_6/pdata/2/ina/6B.COMB.seq:\*  
5: /cgn2\_6/pdata/2/ina/PCRTUS.COMB.seq:\*  
6: /cgn2\_6/pdata/2/ina/Backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	220	100.0	3007 4	US-09-193-562D-27 Sequence 27, Appl
2	103.2	46.9	3317 4	US-09-193-562D-1 Sequence 1, Appl
3	99.4	45.2	3418 4	US-09-193-562D-29 Sequence 29, Appl
4	94.2	42.8	3022 4	US-09-193-562D-33 Sequence 33, Appl
5	82.4	37.5	2970 4	US-09-193-562D-31 Sequence 31, Appl
6	29.8	13.5	519 4	US-09-068-140A-3 Sequence 3, Appl
7	29.8	13.5	3447 2	US-08-252-995D-3 Sequence 3, Appl
8	29.6	13.5	3447 2	US-08-834-108-3 Sequence 3, Appl
9	29.6	13.5	1117 4	US-09-247-373B-33 Sequence 33, Appl
10	29.6	13.5	2065 3	US-08-335-865F-8 Sequence 8, Appl
11	29.4	13.4	1140 4	US-08-943-731-209 Sequence 209, App
12	29.4	13.4	6243 2	US-09-056-073-1 Sequence 1, Appl
13	29.4	13.4	20084 4	US-08-943-731-5 Sequence 5, Appl
14	28.6	13.0	13737 4	US-09-538-414-10 Sequence 10, Appl
15	28.2	12.8	13146 2	US-08-724-354D-3 Sequence 3, Appl
16	28.2	12.8	13146 3	US-09-270-984A-3 Sequence 3, Appl
17	28	12.7	7218 1	US-08-232-463-14 Sequence 14, Appl
18	27.6	12.5	989 4	US-09-312-183A-20 Sequence 20, Appl
19	27.6	12.5	1894 5	PCT-US91-08177-10 Sequence 10, Appl
20	27.6	12.5	2121 2	US-08-897-340-6 Sequence 6, Appl
21	27.6	12.5	2121 3	US-09-252-329-6 Sequence 6, Appl
22	27.4	12.5	7323 5	PCT-US91-08177-11 Sequence 1, Appl
23	27.4	12.5	471 5	PCT-US95-13658-1 Sequence 1, Appl
24	27.4	12.5	837 1	US-08-832-883-56 Sequence 56, Appl
25	27.4	12.5	837 2	US-08-832-877-56 Sequence 56, Appl
26	27.4	12.5	1910 1	US-08-371-930-2 Sequence 2, Appl
27	27.4	12.5	1910 5	PCT-US94-01712-2 Sequence 2, Appl

28	27.4	12.5	2296 4	US-08-496-841C-137 Sequence 137, App
c 29	27.2	12.4	90050 4	US-09-245-041-5 Sequence 5, Appl
c 30	27	12.3	1798 2	US-08-557-128-12 Sequence 12, Appl
c 31	26.8	12.2	3627 4	US-09-323-873A-6 Sequence 6, Appl
c 32	26.8	12.2	19557 5	PCT-US92-06300-1 Sequence 1, Appl
c 33	26.6	12.1	321 2	US-08-520-678A-23 Sequence 23, Appl
c 34	26.6	12.1	321 4	US-08-897-126-23 Sequence 23, Appl
c 35	26.6	12.1	356 2	US-08-520-678A-22 Sequence 22, Appl
c 36	26.6	12.1	356 4	US-08-897-126-22 Sequence 22, Appl
c 37	26.6	12.1	1921 2	US-08-557-128-11 Sequence 11, Appl
c 38	26.6	12.1	7859 1	US-07-854-596B-4 Sequence 4, Appl
c 39	26.6	12.1	7859 2	US-08-450-905B-15 Sequence 15, Appl
c 40	26.6	12.1	7859 3	US-07-982-759F-15 Sequence 15, Appl
c 41	26.6	12.1	9646 3	US-08-811-566-1 Sequence 1, Appl
c 42	26.4	12.0	12980 3	US-08-811-566-5 Sequence 5, Appl
c 43	26.4	12.0	2445 6	5215909-9 Parent No. 5215909
c 44	26.4	12.0	246240 2	US-08-724-394A-20 Sequence 20, Appl
c 45	26.4	12.0	246240 2	US-08-724-394A-21 Sequence 21, Appl

## ALIGNMENTS

```
RESULT 1
; US-09-193-562D-27
; Sequence 27, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 27
; LENGTH: 3007
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-193-562D-27

Query Match      100.0%  Score 220;  DB 4;  Length 3007;
Best Local Similarity 100.0%;  Pred. No. 1.9e-61;
Matches 220;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

OY 1 CTATAGTGAATCTGTGACAGAACAAACCAACCAAGAGCTCCAAACCAAGCAAAATC 60
DB 780 CTATAGTGAATCTGTGACAGAACAAACCAACCAAGAGCTCCAAACCAAGCAAAATC 839
OY 61 AAAAATGCAATCTCGAAGCAGATGGAGATGCTGATTTGTGAGACTTTAAGAAAA 120
DB 840 AAAAATGCAATCTCGAAGCAGATGGAGATGCTGATTTGTGAGACTTTAAGAAAA 899
OY 121 CCACTCTTGAAGACAGACCAAAATCCACTTTCATTTGCGAGATGGACAA 180
DB 900 CCACTCTTGAAGACAGACCAAAATCCACTTTCATTTGCGAGATGGACAA 999
OY 181 GAATGTGTTTGAATCTGTGACAGAACAAATCTGGAAGCATGGC 220
DB 960 GAATGTGTTTGAATCTGTGACAGAACAAATCTGGAAGCATGGC 999

RESULT 2
; US-09-193-562D-1
; Sequence 1, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
```

[illegible]

Db 911 AGATGTGACGACCTCAGAAAGGATGATATACAGACTGTGCTGACTTCACACACA 970  
QY 121 CCACCTCTAT-----GACACACAGCCACCAATCCCACTCTCATGCTCAGATTG 174  
Db 971 GCTTCCCATGAAAGGAGGAGCTGAGCTTCCCTCCACATTCCTGCTTGTACAGGCTG 1030  
QY 175 GACAAAGAAATGTGTGTTAGTCTTGACAAATCTGGAAGCATTGCG 220  
Db 1031 GTGACAAAGTGTCTGTGTTAGTGTGTGATGTGTCCAGCAAGATGCG 1076

## RESULT 6

US-09-068-140A-3/c  
; Sequence 3, Application US/09068140A  
; Patent No. 6281409

## GENERAL INFORMATION:

APPLICANT: Mary Rose Woodhead, Mark Andrew Taylor  
APPLICANT: and Rex Michael Brennan  
TITLE OF INVENTION: Blackcurrant Promoters and Genes  
NUMBER OF SEQUENCES: 15  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: SmithKline Beecham Corporation  
STREET: 709 Swedeland Road  
CITY: King of Prussia  
STATE: PA  
COUNTRY: USA  
ZIP: 19406-0939

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/068,140A  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/EP96/04807  
FILING DATE: No. 6281409ember 4, 1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Dineer, Data L.  
REGISTRATION NUMBER: 33,680  
REFERENCE/DOCKET NUMBER: C70237  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 610-270-5017  
TELEFAX: 610-270-5090

## TELEX:

INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:

LENGTH: 519 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: CDNA  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Ribes nigrum  
STRAIN: Ben Alder  
US-09-068-140A-3

Query Match 13.5%; Score 29.8; DB 4; Length 519;  
Best Local Similarity 50.3%; Pred. No. 1.2;  
Matches 73; Conservative 0; Mismatches 72; Indels 0; Gaps 0;

QY 2 TATAGTGAATTCCTGACAGCAAAACACACAAAGAGTCCAAAGCAATGCA 61  
Db 518 TTTTCTTTTCTTTTACATTAACATTAAGTTCATTTATTTAACCACAGAAACACA 459  
QY 62 AAATGCAATCTCCGAGACACATGGAAGTGCCTGATTCCTGAGACTTTAAGAAAC 121  
Db 458 AACATGACCATTAACAAGGACACGCGGAAACACGAAACAACTGACACTTAGGTGCA 399

QY 122 CACTCTATGACACACAGCCACCA 146  
Db 398 TATTTCTTACCCACACAGACCA 374

## RESULT 7

US-08-252-995D-3/c  
; Sequence 3, Application US/08252995D  
; Patent No. 5650501

## GENERAL INFORMATION:

APPLICANT: Dennis, James W  
APPLICANT: Hefernan, Mike  
APPLICANT: Fode, Carol  
TITLE OF INVENTION: NOVEL SERINE/THREONINE KINASE  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: HERESKIN & PARR  
STREET: 40 King Street West  
CITY: Toronto  
STATE: Ontario  
COUNTRY: Canada  
ZIP: M5H 3Y2

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/252,995D  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Kurdzyk, Linda M  
REGISTRATION NUMBER: 34,971  
REFERENCE/DOCKET NUMBER: 3153-96  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (416) 364-7311  
TELEFAX: (416) 361-1398

## INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:  
LENGTH: 3447 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
ORIGINAL SOURCE:  
ORGANISM: Mus musculus  
DEVELOPMENTAL STAGE: Lymphoid cDNA library  
IMMEDIATE SOURCE:  
LIBRARY: Murine lymphoid  
CLONE: WGA-resistant chop clones  
FEATURE:  
NAME/KEY: 5'UTR  
LOCATION: 1..205  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 206..2980  
FEATURE:  
NAME/KEY: 3'UTR  
LOCATION: 2981..3447  
US-08-252-995D-3

Query Match 13.5%; Score 29.8; DB 1; Length 3447;  
Best Local Similarity 52.9%; Pred. No. 2.6;  
Matches 64; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 16 GTAGAGAAACAAACCAACCAAGAGTCCAAAGCAAGCAAAATGCAATCTCC 75  
Db 3271 GTAAAGAAATTAACAAACCAAGCCATACACACTTAGTCAATACAAACATAGCA 3212  
QY 76 GAAGCAGATGGGAAGTGCCTGATTCCTGAGGACTTTAAGAAACCACTCTATGACAA 135

Db	3211	GCACAACTTGAAGGATTACATGCTTGGAGCAGCAAAATTAGATGTCCTTACGCTTATGACCA	3152
Qy	136	C 136	
Db	3151	C 3151	

## RESULT 8

US-88-834-108-3/c  
: Sequence 3, Application US/08834108  
: Patent No. 5976893  
: GENERAL INFORMATION:  
: APPLICANT: Dennis, James W  
: APPLICANT: Hefternan, Mike  
: APPLICANT: Fode, Carol  
: TITLE OF INVENTION: NOVEL SERINE/THREONINE KINASE  
: NUMBER OF SEQUENCES: 14  
: CORRESPONDENCE ADDRESS:  
: ADDRESSEE: BERSKIN & PARR  
: STREET: 40 King Street West  
: CITY: Toronto  
: STATE: Ontario  
: COUNTRY: Canada

```

? ZIP: MSH 3Y2
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? COMPUTER: IBM PC compatible
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: PatentIn Release #1.0, Version #1.3GD
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/08/834,108
? FILING DATE:
?
```

[illegible]

## RESULT 9

US-09-247-373B-33  
Sequence 33, Application US/09247373B  
Patent No. 6168954  
GENERAL INFORMATION:  
APPLICANT: MCCONIGLE, BRIAN  
APPLICANT: O'KEEFE, DANIEL  
TITLE OF INVENTION: SOYEAN GLUTATHIONE-S-TRANSFERASE ENZYMES  
FILE REFERENCE: CL-1108-A  
CURRENT APPLICATION NUMBER: US/09/247,373B  
CURRENT FILING DATE: 1999-02-10  
PRIOR APPLICATION NUMBER: 08/924,747  
PRIOR FILING DATE: 1997-09-05  
NUMBER OF SEQ ID NOS: 56  
SOFTWARE: Microsoft Office 97  
SEQ ID NO 33

```

? LENGTH: 111
? TYPE: DNA
? ORGANISM: SOYBEAN
? FEATURE:
? NAME/KEY: unsure
? LOCATION: (1101)
? OTHER INFORMATION: M-A OR C
? NAME/KEY: unsure
? LOCATION: (1104)
? OTHER INFORMATION: M-A OR C
? NAME/KEY: unsure
? LOCATION: (1116)
? OTHER INFORMATION: N-G OR A OR T OR C
? US-09-247-373B-33

```

## RESULT 1C

```

US-08-335-865J-8
: Sequence 8, Application US/08335865J
: Patent No. 6107472
:
: GENERAL INFORMATION:
:
: APPLICANT: Stacker, Steven A.; Hovens, Christopher M.,
:
: APPLICANT: Wilks, Andrew F.
:
: TITLE OF INVENTION: RECEPTOR-TYPE TYROSINE KINASE-LIKE MOLECULES
:
: NUMBER OF SEQUENCES: 21
:
: CORRESPONDENCE ADDRESS:
:
: ADDRESSEE: Fulbright & Jaworski L.L.P.
:
: STREET: 666 Fifth Ave
:
: CITY: New York
:
: STATE: New York
:
: COUNTRY: USA
:
: ZIP: 10103
:
: COMPUTER READABLE FORM:
:
: MEDIUM TYPE: Diskette, 3.5 inch, 720 KB storage
:
: COMPUTER: IBM PS/2
:
: OPERATING SYSTEM: PC-DOS
:
: SOFTWARE: ASCII/mordperfect

```

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/335,865J  
FILING DATE: 19-January-1995  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/AU93/00210  
FILING DATE: 10-May-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PL2358  
FILING DATE: 11-May-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Hanson, No. 6107472man D.  
REGISTRATION NUMBER: 30,946  
REFERENCE/DOCKET NUMBER: LUD-5277  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 318-3100  
TELEFAX: (212) 752-5958  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2065  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-335-865J-8

Query Match 13.5%; Score 29.6; DB 3; Length 2065;  
Best Local Similarity 46.6%; Pred. No. 2.5; 109; Indels 0; Gaps 0;  
Matches 95; Conservative 0; Mismatches 0;

QY 9 GAATTCGTACAGAAACCAACACAGAGCTCCAAACAGCAAAATCAAAATGCG 68  
DB 1102 GATTTAGTATGATAAAGACCAATTAAGAGACCAACATTTGTAACAGTTAA 1161  
QY 69 AATTCGAGACATGGAAGTATCCGTGATTTCTAGAGACTTTAAGAAACACTCTCT 128  
DB 1162 AGACCAAGCATCTGAAATTCAGGATGAGATGCTCACCAGAGATGCAAGTTCCAGG 1221  
QY 129 ATGACACAGAGCCACCAATCCACCTTCATTGCTGAGATTGGAAGAAATGTG 188  
DB 1222 TCTGACACACAGAAACCTCTTCTATTACTATGTGTGATAGAGAGAAAGCC 1281  
QY 189 TGTTAGTCTCTGACAAATCTGA 212  
DB 1282 CATGCTGTATGCGCATATCATGAA 1305

RESULT 11  
US-08-943-731-209/C  
Sequence 209, Application US/08943731  
Patent No. 6265157  
GENERAL INFORMATION:  
APPLICANT: PROCKOP, DARWIN J.  
APPLICANT: SPOTILA, LORETTA D.  
APPLICANT: DELTAS, CONSTANTINOS D.  
APPLICANT: SEREDA, LARISA  
APPLICANT: LARSON, ANDREA W.  
APPLICANT: PACK, MICHAEL  
APPLICANT: COLIGE, ALAIN  
APPLICANT: EARLY, JAMES  
APPLICANT: KORRKO, JARMO  
APPLICANT: ALA-KORRKO, LEENA, et al.  
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DETECTING  
TITLE OF INVENTION: ALTERED TYPE I OR TYPE IX COLLAGEN GENE SEQUENCES  
NUMBER OF SEQUENCES: 666  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.  
STREET: ONE COMMERCE SQUARE, 2005 MARKET STREET, 22ND  
STREET: FLR.  
CITY: PHILADELPHIA  
STATE: PA  
COUNTRY: USA  
ZIP: 19103-7086  
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/943,731  
FILING DATE: 03-OCT-1997  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/212,322  
FILING DATE: 14-MAR-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/803,628  
FILING DATE: 03-DEC-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: DOTLE LEARY Ph.D., KATHRYN  
REGISTRATION NUMBER: 36,317  
REFERENCE/DOCKET NUMBER: 9598-27  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 215-965-1284  
TELEFAX: 215-567-2991  
TELEX: 831-494  
INFORMATION FOR SEQ ID NO: 209:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1140 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-943-731-209

Query Match 13.4%; Score 29.4; DB 4; Length 1140;  
Best Local Similarity 76.6%; Pred. No. 2.3; 11; Indels 0; Gaps 0;  
Matches 36; Conservative 0; Mismatches 0;

QY 24 CAAACCCACCAACAAAGAGCTCCAAACAGCAAAATCAAAATGCA 70  
DB 359 CAAACCAAAACACAGAAACCCCAAAACCAAAACCAAAACCAAAACCA 313

RESULT 12  
US-09-056-075-1/C  
Sequence 1, Application US/09056075  
Patent No. 5955368  
GENERAL INFORMATION:  
APPLICANT: Johnson, Eric A.  
APPLICANT: Bradshaw, Marile  
APPLICANT: Rood, Julian  
TITLE OF INVENTION: Expression System for Clostridium  
TITLE OF INVENTION: Species  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Quarles & Brady  
STREET: 1 South Pluckney Street  
CITY: Madison  
STATE: WI  
COUNTRY: US  
ZIP: 53701-2113  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/056,075  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Seay, Nicholas J.  
REGISTRATION NUMBER: 27386  
REFERENCE/DOCKET NUMBER: 960296, 95238  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 608-251-5000

```

1 TELECOMMUNICATION INFORMATION:
2 TELEPHONE: 215-965-1284
3 TELEFAX: 215-567-2991
4 TELEX: 831-494
5 INFORMATION FOR SEQ ID NO: 5:
6 SEQUENCE CHARACTERISTICS:
7 LENGTH: 20084 base pairs
8 TYPE: nucleic acid
9 STRANDEDNESS: single
10 TOPOLOGY: linear
11 MOLECULE TYPE: DNA (genomic)
12
13 US-08-943-731-5
14
15 Query Match 13.4%; Score 29.4; DB 4; Length 20084;
16 Best Local Similarity 76.6%; Pred. No. 7;
17 Matches 36; Conservative 0; Mismatches 11; Indels 0; Gaps 0;
18
19 QY 24 CAATACCAACACCAAGAGCTCCAAACAGCAAAATCAAAATGCAA 70
20 ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
21 Db 19303 CAAATACCAAAACAAAGAAACCCCAAAACCAAAACAAACAAACAA 19257
22
23 RESULT 14
24 US-09-538-414-10/c
25 Sequence 10; Application US/09538414
26 Patent No. 634655
27 GENERAL INFORMATION:
28 APPLICANT: Hohm, T.
29 APPLICANT: Salmeron, J.
30 APPLICANT: Peters, C.
31 APPLICANT: Kendra, D.
32 APPLICANT: Reinders, J.
33 APPLICANT: Kuznie, R.
34 APPLICANT: Dill-Mackey, R.
35 TITLE OF INVENTION: Transgenic Plant and Methods
36 FILE REFERENCE: sequencelist
37 CURRENT APPLICATION NUMBER: US/09/538,414
38 CURRENT FILING DATE: 2000-03-29
39 NUMBER OF SEQ ID NOS: 11
40 SOFTWARE: PatentIn Ver. 2.0
41 SEQ ID NO 10
42 LENGTH: 13737
43 TYPE: DNA
44 ORGANISM: Plasmid
45 FEATURE:
46 OTHER INFORMATION: Description of Artificial Sequence:Plasmid
47
48 US-09-538-414-10
49
50 Query Match 13.0%; Score 28.6; DB 4; Length 13737;
51 Best Local Similarity 67.8%; Pred. No. 11;
52 Matches 40; Conservative 0; Mismatches 19; Indels 0; Gaps 0;
53
54 QY 13 TCTGTACGACCAAAACCAACAAAGAGCTCCAAACAGCAAAATCAAAATGCAT 71
55 ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
56 Db 13637 TCTAAACATGAAGAACTTAACAGAGAGATCGAACAAAGAAAACAAAAATTGATT 13579
57
58 RESULT 15
59 US-08-724-354D-3/c
60 Sequence 3; Application US/08724354D
61 Patent No. 5994119
62 GENERAL INFORMATION:
63 APPLICANT: Dietz, Harry C.
64 TITLE OF INVENTION: MAMMALIAN REGULATOR OF
65 TITLE OF INVENTION: NONSENSE-MEDIATED RNA DECAY
66 NUMBER OF SEQUENCES: 29
67 CORRESPONDENCE ADDRESS:
68 ADDRESSEE: Fish & Richardson, P.C.
69 STREET: 4225 Executive Square, Suite 1400
70 CITY: La Jolla
71 STATE: CA
72 COUNTRY: USA
73 ZIP: 92037
74

```





THIS PAGE BLANK (COPY)

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 : Search time 9.11628 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-8

Perfect score: 253

Sequence: 1 AACCAAGTGTGATGCATC...GGCAGAGTGTGATGCATC 253

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

Number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents\_NA:  
1: /cgn2\_6/prodata/2/ina/5A\_COMB.seq:\*  
2: /cgn2\_6/prodata/2/ina/5B\_COMB.seq:\*  
3: /cgn2\_6/prodata/2/ina/6A\_COMB.seq:\*  
4: /cgn2\_6/prodata/2/ina/6B\_COMB.seq:\*  
5: /cgn2\_6/prodata/2/ina/PCUTUS\_COMB.seq:\*  
6: /cgn2\_6/prodata/2/ina/Backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	253	100.0	3007	US-09-193-562D-27	Sequence 27, Appl
2	93.4	36.9	2970	US-09-193-562D-31	Sequence 31, Appl
3	87	34.4	3317	US-09-193-562D-1	Sequence 1, Appl
4	78.8	31.1	3022	US-09-193-562D-33	Sequence 33, Appl
5	57.4	22.7	3418	US-09-193-562D-29	Sequence 29, Appl
6	29	11.5	933	5340934-12	Patent No. 5340934
7	29	11.5	4821	US-08-913-374-1	Sequence 1, Appl
8	28.6	11.3	9723	US-08-083-590A-21	Sequence 21, Appl
9	28.6	11.3	9723	US-08-532-384-21	Sequence 21, Appl
10	28	11.1	371	US-08-594-031-80	Sequence 80, Appl
11	27.8	11.0	6463	US-08-962-284-3	Sequence 3, Appl
12	27.6	10.9	3872	US-08-331-081B-4	Sequence 4, Appl
13	27	10.7	443	US-08-486-013-65	Sequence 65, Appl
14	27	10.7	445	US-08-486-013-67	Sequence 67, Appl
15	27	10.7	445	US-08-482-279-65	Sequence 65, Appl
16	27	10.7	445	US-08-482-279-67	Sequence 67, Appl
17	27	10.7	445	US-08-342-268-65	Sequence 65, Appl
18	27	10.7	445	US-08-342-268-67	Sequence 67, Appl
19	27	10.7	445	US-09-015-968-65	Sequence 65, Appl
20	27	10.7	445	US-09-015-968-67	Sequence 67, Appl
21	27	10.7	445	US-09-397-386-65	Sequence 65, Appl
22	27	10.7	445	US-09-397-386-67	Sequence 67, Appl
23	27	10.7	2457	US-08-486-013-68	Sequence 68, Appl
24	27	10.7	2457	US-08-482-279-68	Sequence 68, Appl
25	27	10.7	2457	US-08-342-268-68	Sequence 68, Appl
26	27	10.7	2457	US-09-015-968-68	Sequence 68, Appl
27	27	10.7	2457	US-09-397-386-68	Sequence 68, Appl

28	27	10.7	2551	US-08-486-013-70	Sequence 70, Appl
29	27	10.7	2551	US-08-482-279-70	Sequence 70, Appl
30	27	10.7	2551	US-08-342-268-70	Sequence 70, Appl
31	27	10.7	2551	US-09-015-968-70	Sequence 70, Appl
32	27	10.7	2551	US-09-397-386-70	Sequence 70, Appl
33	26.8	10.6	1689	US-09-247-155-61	Sequence 61, Appl
34	26.8	10.6	8133	US-08-480-604A-5	Sequence 5, Appl
35	26.8	10.6	8133	US-08-405-496A-5	Sequence 5, Appl
36	26.8	10.6	8133	US-08-915-136-5	Sequence 5, Appl
37	26.6	10.5	578	US-08-991-789A-35	Sequence 35, Appl
38	26.6	10.5	578	US-09-062-451-35	Sequence 35, Appl
39	26.6	10.5	632	US-09-328-111-53	Sequence 53, Appl
40	26.6	10.5	2305	US-08-526-136-1	Sequence 1, Appl
41	26.6	10.5	2311	US-08-526-136-3	Sequence 3, Appl
42	26.4	10.4	2706	US-08-454-549-1	Sequence 1, Appl
43	26.4	10.4	2706	US-08-454-552-1	Sequence 1, Appl
44	26.4	10.4	2706	US-08-676-351-1	Sequence 1, Appl
45	26.2	10.4	455	US-09-026-343-20	Sequence 20, Appl

## ALIGNMENTS

RESULT 1  
US-09-193-562D-27  
Sequence 27, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedict U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193,562D  
PRIOR FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 27  
LENGTH: 3007  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-27

Query Match 100.0%; Score 253; DB 4; Length 3007;  
Best Local Similarity 100.0%; Pred. No. 2.8e-79;  
Matches 253; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AACAAAGTGTGATGCATCAGACAGTGTGGGCCCCCTGCGAGCTCAAGAACTAG 60  
|||||  
Db 1323 AACAAAGTGTGATGCATCAGACAGTGTGGGCCCCCTGCGAGCTCAAGAACTAG 1382

QY 61 AGGAGCTGTCCAAATGACAGAGGTTTACAGACATATGCTTACATCAAGTTCAAGCA 120  
|||||  
Db 1383 AGGAGCTGTCCAAATGACAGAGGTTTACAGACATATGCTTACATCAAGTTCAAGCA 1442

QY 121 ATGGCCATTTGATGCTTTGGGCCCCCTTACAGAGAAATGAGCTGTCTCAGGCT 180  
|||||  
Db 1443 ATGGCCATTTGATGCTTTGGGCCCCCTTACAGAGAAATGAGCTGTCTCAGGCT 1502

QY 181 CCATTCAGCTTGAAGATGAGGATTAACCTCCAGAACAGCCAGTGAATGAATGGACAG 240  
|||||  
Db 1503 CCATTCAGCTTGAAGATGAGGATTAACCTCCAGAACAGCCAGTGAATGAATGGACAG 1562

QY 241 TGATCGTGACAG 253  
|||||  
Db 1563 TGATCGTGACAG 1575

RESULT 2  
US-09-193-562D-31  
Sequence 31, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:

```

: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 16617.0052
: CURRENT APPLICATION NUMBER: US/09/193.562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065.922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 31
: LENGTH: 2970
: TYPE: DNA
: ORGANISM: Homo sapiens
: US-09-193-562D-31

```

Query Match	36.9%	Score 93.4	DB 4	Length 2970
Best Local Similarity	61.1%	Pred. No. 4.4e-23		
Matches 151, Conservative	0	Mismatches 96	Indels 0	Gaps 0

QY	6	AGTGGTCCATTCATCCACACAGTCGGCTTTGGGGCCCTCTGCAGCTCCAAAGACTTAAGAG	65
Db	1414	AGTGGTCCATTCATTCACCTCATTTGCCCTGGTTCATCTCGACCCCAATTTGGAGGAA	1473
QY	66	CTGTCCAAATGACAGAGGGTTTACAGACATATGCTTCAGATCAAGTTCCAGAACAAATGGC	125
Db	1474	TTATCAGGCTTTCACAGAGGGTTTAAAGTCTTGTTCCAGATATATFCAAACTCCAACTAGAC	1533
QY	126	CTCATGTATGCTTTTGGGGCCCTTATCATAGGAAATGAGAGCTGTCTCAGAGGCTCCATC	185
Db	1534	ATGATTTATGCTTTTCATAGCAATTTCTCTGGAACTGGAGACATTTTCCAGCAACATATT	1593
QY	186	CAGCTTGAGATGAAGGATTTAAACCTCCAGAACAGCCATGGATTAATGGCAAGTGATC	245
Db	1594	CAGCTTGAAGTACAGGTTGAAATATGCAAACTCACCATTCATTTGAAAAACACAGTACT	1653
QY	246	GTGGACA	252
Db	1654	GTGGATA	1660

```

RESULT 3
US-09-193-562D-1
: Sequence 1, Application US/091935562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 1
: LENGTH: 3317
: TYPE: DNA
: ORGANISM: Unknown
: FEATURE:
: OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated
: OTHER INFORMATION: protein from bovine endothelial cells
US-09-193-562D-1

```

```

Query Match      34.4%; Score 87; DB 4; Length 3317;
Best Local Similarity 62.1%; Pred. No. 8.4e-21;
Matches 157; Conservative 0; Mismatches 90; Indels 6; Gaps 1;

QY 1 AACAAAGTGGTCCATCATCCACACAGTGGCTTTGGGGCCCTCTGTCAGCTCAAGAAGTAG 60
   || || || || || || || || || || || || || || || || || || || || || ||
Db 1351 AACGAAGTGTGCATCATCCACACCATTTGCTCTGGGACCTCTGCTGGCAAGAAGCTGG 1410
   || || || || || || || || || || || || || || || || || || || || || ||

QY 61 AGGAGCTTCCCAAAATGACAGAGAGTTTACACACATATGCTTCAATCATCAAGTTCCAGACA 120
   || || || || || || || || || || || || || || || || || || || || || ||

```

[illegible]

RESULT 4  
US-09-193-562D-33  
; Sequence 33, Application US/09193562D

```

1 GENERAL INFORMATION:
2 APPLICANT: Pauli, Benedicht U.
3 TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
4 TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
5 FILE REFERENCE: 18617 .0052
6 CURRENT APPLICATION NUMBER: US/09/193,562D
7 PRIORITY FILING DATE: 1998-11-17
8 PRIOR APPLICATION NUMBER: US/60/065,922
9 PRIORITY FILING DATE: 1997-11-17
10 NUMBER OF SEQ ID NOS: 47
11 SEQ ID NO 33
12 LENGTH: 3022
13 TYPE: DNA
14 ORGANISM: Mus musculus
15 US-09-193-562D-33

```

Query Match	31.1%	Score 78.8:	DB 4	Length 3022;
Best Local Similarity	60.5%	Pred. No. 6.1e-18;		
Matches 150; Conservative	0;	Mismatches 92;	Indels 6;	Gaps 1;

[illegible]

```

RESULT 5 - -
US-09-193-562D-29
; Sequence 29, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065.922
; PRIOR FILING DATE: 1997-11-17

```

NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 29  
LENGTH: 3418  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-5620-29

Query Match 22.7%; Score 57.4; DB 4; Length 3418;  
Best Local Similarity 63.3%; Pred. No. 2, 3e-10;  
Matches 88; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

QY 115 AGAACAATGGCCCTTATGATGCTTTGGGCCCCCTTCATCAGAAATGAGCTGTCTCTC 174  
DB 1469 ACATAAATGGCCCTTATGATGCTTTGAGCAGCAATTCATCTAGAAAGTGGCAGCATCTCTC 1528  
QY 175 AGCCCTCCATCCAGCTTGAGAGTAAAGGATTAAACCTCCAGAAACGACGATGATGATG 234  
DB 1529 AGCAGGCTCTTCAAGTGAAGTAAACCTTGAATATCCAGCGAAGAAATGATTAATG 1588

DB 235 GCACAGTATGCTGGACAG 253  
1589 GTACAGTCCCTGTGATAG 1607

RESULT 6  
5340934-12  
Patent No. 5340934  
APPLICANT: TERMINE, JOHN D.; YOUNG, MARIAN F.; FISHER, LARRY W.  
ROBEY, PAMELA G.  
TITLE OF INVENTION: CDNA SEQUENCES OF HUMAN BONE MATRIX PROTEINS  
NUMBER OF SEQUENCES: 13  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/432,044  
FILING DATE: 03-NOV-1989  
SEQ ID NO: 12  
LENGTH: 933

Query Match 11.5%; Score 29; DB 6; Length 933;  
Best Local Similarity 45.7%; Pred. No. 1.2;  
Matches 101; Conservative 0; Mismatches 120; Indels 0; Gaps 0;

QY 28 TCGCTTTGGGCGCCCTTCAGCTCAGCAAGTACAGAGCTGTCCAAATGACAGAGGTT 87  
DB 53 TGGCGGGGAGGGCCCTTGGCAGCCCCCTCAGCAAGAGCCCTCGTAGAGACAGAGTGG 112  
88 TACAGACATATGCTTCAGATCAAGTTCAGAAACAATGGCCCTCATTTGTTGGGCC 147  
113 TGAAGAAGAACTGTGAGAGGTGACTGATCTGTGGAGATTAATCTGTCCAGGTGG 172  
QY 148 TTTATCAGGAATGAGAGCTGTCTCAGCGCTTCATCCAGCTTGAGAGTAAAGGATTAA 207  
DB 173 AAGTAGAGAAATTTGATGATGCTGCGCAAGAACCGAAGAGAGGTGTGGCGGAATATC 232  
QY 208 CCTCCAGAACAGCCAGTGTGATGAGCAGACATGATCGTG 248  
DB 233 CTGCGCAGAACACCATCTGCAACACGCGCAAGGTGTGGCAG 273

RESULT 7  
US-08-913-374-1  
Sequence 1, Application US/08913374  
Patent No. 6057492  
GENERAL INFORMATION:  
APPLICANT: Petrus Theodorus Dehaan  
TITLE OF INVENTION: Virus resistant or tolerant plants  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: No. 6057492artls Corporation  
STREET: P.O. Box 12257  
CITY: Research Triangle Park  
STATE: NO. 6057492th Carolina  
COUNTRY: US

ZIP: 27709  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/913,374  
FILING DATE: March 22, 1996  
CLASSIFICATION: 800  
ATTORNEY/AGENT INFORMATION:  
NAME: Hoxie, Thomas  
REGISTRATION NUMBER: 32,993  
REFERENCE/DOCKET NUMBER: 137-1099/PCT  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 4821 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: unknown  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Tosopovirus  
US-08-913-374-1

Query Match 11.5%; Score 29; DB 3; Length 4821;  
Best Local Similarity 63.8%; Pred. No. 2.7;  
Matches 44; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

QY 97 ATGCTTCAATCAAGTTCAGACATGCGCTCATGCTTTGGGCGCCCTTCATCAG 156  
DB 476 ATGTTATATTCAGATTGAAACAATGTCATATATCTCTGTTCGATTCACAG 535  
QY 157 GAATGGAG 165  
DB 536 AAGCTTAG 544

RESULT 8  
US-08-083-590A-21/C  
Sequence 21, Application US/08083590A  
Patent No. 5786158  
GENERAL INFORMATION:  
APPLICANT: Artavanis-Tsakonas, S. et al.  
TITLE OF INVENTION: Therapeutic And Diagnostic Methods  
TITLE OF INVENTION: And Compositions Based On No. 5786158ch Proteins And  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/083,590A  
FILING DATE: 25-JUN-1993  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Mistrock, S. Leslie  
REGISTRATION NUMBER: 18,872  
REFERENCE/DOCKET NUMBER: 7326-015  
TELECOMMUNICATION INFORMATION:

LENGTH: 9/23 base  
TYPE: nucleic acid

ORIGINAL SOURCE  
US-08-594-031-80

ORIGINAL SOURCE  
US-08-594-031-80

Query Match 11.18; Score 28; DB 1; Length 371;  
Best Local Similarity 55.08; Pred. No. 1.6;  
Matches 55; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

72 AAATGACAGAGGTTTACAGACATATGCTTACATCAAGTTCAGAACATGGCTCAAT 131

75 AAATGTCATCATCTTACACAGCTGTGAACAGGTCAGTTCAGATCGTGAAGCTTG 134

132 GATGCTTTGGGCGCTTTCATCAGAAATGAGCTGCT 171

135 AGATGTCTTCTTGTGACATCAGAACTGGAATGTTT 174

## RESULT 11

US-08-962-284-3/c  
Sequence 3, Application US/08962284  
Patent No. 5985608

## GENERAL INFORMATION:

APPLICANT: Luna, Elizabeth J.  
APPLICANT: Pestonjasp, Kersi N.

APPLICANT: Wulfkube, Julia D.

TITLE OF INVENTION: ACTIN-BINDING POLYPEPTIDES  
TITLE OF INVENTION: AND NUCLEIC ACIDS ENCODING THE SAME

NUMBER OF SEQUENCES: 31  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street

CITY: Boston

STATE: MA  
COUNTRY: US

ZIP: 02110-2804  
COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible

OPERATING SYSTEM: Windows95  
SOFTWARE: FastSeq for Windows version 2.0

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/962,284

FILING DATE: 31-OCT-1997  
ATTORNEY/AGENT INFORMATION:

NAME: Fasse, Peter J.  
REGISTRATION NUMBER: 32,983

REFERENCE/DOCKET NUMBER: 07917/058001  
TELECOMMUNICATION INFORMATION:

TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906

TELEX: 200154  
INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:  
LENGTH: 6463 base pairs

TYPE: nucleic acid  
STRANDEDNESS: double

TOPOLOGY: linear  
MOLECULE TYPE: cDNA

FEATURE:  
NAME/KEY: Coding Sequence

LOCATION: 201...5576  
US-08-962-284-3

Query Match 11.08; Score 27.8; DB 2; Length 6463;  
Best Local Similarity 55.88; Pred. No. 8.3;  
Matches 53; Conservative 0; Mismatches 42; Indels 0; Gaps 0;

158 AATGAGCTGTCTTACAGGCTTCAACAGCTTGAAGTAAGGATTAACCTCCAGAA 217

3921 AATATGCCAGTCGGCGGCCCTTCTTCCGTGGAATGAGGATTCATTCGCCAG 3862

218 CAGCCAGTGAATGAGCAAGATCGTGAGACA 252

3861 GATCCAGCGGTTATGTCAAAATTCGTAGTCA 3827

## RESULT 12

US-08-331-081B-4/c  
Sequence 4, Application US/08331081B  
Patent No. 598697

## GENERAL INFORMATION:

APPLICANT: Devlin, Robert H.

TITLE OF INVENTION: Transgenic Fish and Vectors Therefor  
NUMBER OF SEQUENCES: 17

CORRESPONDENCE ADDRESS:  
ADDRESSEE: McFadden, Fincham

STREET: 225 Metcalfe Street, Suite 606  
CITY: Ottawa

STATE: Ontario  
COUNTRY: Canada

ZIP: K2P 1P9  
COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette 3.5 inch, 1.44 MB  
MEDIUM TYPE: storage

COMPUTER: IBM PC or Compatibles  
OPERATING SYSTEM: PC Dos 5.0

SOFTWARE: Wordperfect 5.1 (Palseq.txt)  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/331,081B  
CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: Canada 2,126,138

FILING DATE: June 17, 1994  
ATTORNEY/AGENT INFORMATION:

NAME: Fincham, H. Ian  
REGISTRATION NUMBER: 26,375

REFERENCE/DOCKET NUMBER: 5478-1A  
TELECOMMUNICATION INFORMATION:

TELEPHONE: (613) 234-1907  
TELEFAX: (613) 234-5233

INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:

LENGTH: 3872 base pairs  
TYPE: nucleic acid

STRANDEDNESS: single  
TOPOLOGY: linear

US-08-331-081B-4

Query Match 10.98; Score 27.6; DB 2; Length 3872;  
Best Local Similarity 48.18; Pred. No. 7.5;  
Matches 78; Conservative 0; Mismatches 84; Indels 0; Gaps 0;

46 CAGCTCAAGACTAGAGAGCTGTCCAAATGACAGAGGTTTACAGACATATGCTTCAG 105

2213 CACATCAGCGCTGCAAGTAGGTTTGCAAATTCAGTACCTTGATGTATTATCTTTG 2154

106 ATCAAGTTCAGAACATGCGCTCATTCATGCTTTTGGGCGCTTTCATCAGAAATGAG 165

2153 TGAATAATGTAGAAATGATGCTTATATCTGTGTACATGATGATGAATGAAT 2094

166 CTGCTCTCAGCGCTCCATCAGCTTGAAGTAAAGGATTAA 207

2093 CAATCACTCAATGCTACTGCAATGCAAAACACAGATATTAA 2052

## RESULT 13

US-08-486-013-65  
Sequence 65, Application US/08486013  
Patent No. 5731149

## GENERAL INFORMATION:

APPLICANT: Seisted, Michael E.

APPLICANT: Ouellette, Andre J.  
TITLE OF INVENTION: Antibiotic Cryptidin Peptides and Methods

TITLE OF INVENTION: of Their Use  
NUMBER OF SEQUENCES: 70

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700

CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/486,013  
FILING DATE:  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/342,268  
FILING DATE: 18-NOV-1994  
APPLICATION NUMBER: US 07/930,649  
FILING DATE: 14-AUG-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/889,020  
FILING DATE: 26-MAY-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Campbell, Cathryn A.  
REGISTRATION NUMBER: 31,815  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 445 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
US-08-486-013-65

Query Match 10.7%; Score 27; DB 1; Length 445;  
Best Local Similarity 49.6%; Pred. No. 4;  
Matches 69; Conservative 0; Mismatches 70; Indels 0; Gaps 0;

QY 93 ACATATGCTTCAGATCAAGTTCAGAACAAATGGCCCTCATTTGAGGCGCCCTTTCA 152  
DB 18 ACCAATCTCCAGGTGATTCAGACCATGAAAGACTCTGCTCCTGCGCTTGCTCC 77  
QY 153 TCAGGAATGAGAGCTGTCTCTCAGCGCTCATTCACAGTTGAGAGTAAGGATTAAACCTC 212  
DB 78 TGCTGCATTCCAGGTCCAGGCTGATCCATTCAAGAGCGAAGAAAGACTTAACCTG 137

QY 213 CAGACAGCCAGTGATGA 231  
DB 138 AGGAGCAGCCAGCAGATGA 156

RESULT 14  
US-08-486-013-67  
Sequence 67, Application US/08486013  
Patent No. 5731149  
GENERAL INFORMATION:  
APPLICANT: Selsted, Michael E.  
APPLICANT: Ouellette, Andre J.  
TITLE OF INVENTION: Antibiotic Cryptdin Peptides and Methods  
TITLE OF INVENTION: of Their Use  
NUMBER OF SEQUENCES: 70  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/486,013  
FILING DATE:  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/342,268  
FILING DATE: 18-NOV-1994  
APPLICATION NUMBER: US 07/930,649  
FILING DATE: 14-AUG-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/889,020  
FILING DATE: 26-MAY-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Campbell, Cathryn A.  
REGISTRATION NUMBER: 31,815  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 67:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 445 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
US-08-486-013-67

Query Match 10.7%; Score 27; DB 1; Length 445;  
Best Local Similarity 49.6%; Pred. No. 4;  
Matches 69; Conservative 0; Mismatches 70; Indels 0; Gaps 0;

QY 93 ACATATGCTTCAGATCAAGTTCAGAACAAATGGCCCTCATTTGAGGCGCCCTTTCA 152  
DB 18 ACCAATCTCCAGGTGATTCAGACCATGAAAGACTCTGCTCCTGCGCTTGCTCC 77  
QY 153 TCAGGAATGAGAGCTGTCTCTCAGCGCTCATTCACAGTTGAGAGTAAGGATTAAACCTC 212  
DB 78 TGCTGCATTCCAGGTCCAGGCTGATCCATTCAAGAGCGAAGAAAGACTTAACCTG 137

QY 213 CAGACAGCCAGTGATGA 231  
DB 138 AGGAGCAGCCAGCAGATGA 156

RESULT 15  
US-08-482-279-65  
Sequence 65, Application US/08482279  
Patent No. 5840498  
GENERAL INFORMATION:  
APPLICANT: Selsted, Michael E.  
APPLICANT: Ouellette, Andre J.  
TITLE OF INVENTION: Antibiotic Cryptdin Peptides and Methods  
TITLE OF INVENTION: of Their Use  
NUMBER OF SEQUENCES: 70  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Campbell and Flores  
STREET: 4370 La Jolla Village Drive, Suite 700  
CITY: San Diego  
STATE: California  
COUNTRY: USA  
ZIP: 92122  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/482,279  
FILING DATE:  
CLASSIFICATION: 530  
PRIOR APPLICATION DATA:



APPLICATION NUMBER: US 08/342,268  
FILING DATE: 18-NOV-1994  
APPLICATION NUMBER: US 07/930,649  
FILING DATE: 14-AUG-1992  
PRIOR APPLICATION DATA: US 07/889,020  
APPLICATION NUMBER: US 07/889,020  
FILING DATE: 26-MAY-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Campbell, Cathryn A.  
REGISTRATION NUMBER: 31,815  
REFERENCE/DOCKET NUMBER: P-UC 1206  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 535-9001  
TELEFAX: (619) 535-8949  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 445 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
S-08-482-279-65

Query Match 10.7%; Score 27; DB 2; Length 445;  
Best Local Similarity 49.6%; Pred. No. 4;  
Matches 69; Conservative 0; Mismatches 70; Indels 0; Gaps 0;  
QY 93 ACATATGCTCAGATCAAGTTCAGACATGGCCTCATGTGATGCTTTGGGCCCTTCA 152  
DB 18 ACCAATCTCCAGGTGACTTCAGACCAATGAAGACTCTTGCTCTGCTGCTGTC 77  
QY 153 TCAGGAATGGAGCTGCTCTCAGAGGCTCCATCCAGCTTGAGAGTAAAGGATTAACCTC 212  
DB 78 TCGTGGCATTCAGAGTCCAGGCTGATCCATTCAGAGGCAAGAGAGACTTAAACTG 137  
QY 213 CAGACAGCCAGTGATGA 231  
DB 138 AGGAGCAGCCAGCATGA 156

Search completed: October 17, 2002, 11:14:03  
Job time : 23.1163 secs

Page Blank (uspto)



```

Db      447  Glutenserlyskmetthrnglyglyleuglnthryrvalaserasplnvalglnasn 466
OY      123  GGCCCTCATGATGGTTTGGGGCCCTTCATCAGAAATGAGCGTGCTCTCACGCCCTCC 182
        |||||||
Db      467  GlyleuileaspalapheglYAlaleuSerSerglYnsnglYAlavalserglnarSer 486
OY      183  ATCCAGCTTGAGATAAAGCATTAACCTCCAGAACCAAGCCAGTCGATGCAGTAGTG 242
        |||||||
Db      487  IlleglnleugluserlysglyleuthrleuglnasnsergnintrpkewasnlglyThrVal 506
OY      243  ATCGTGAC 251
        |||||||
Db      507  Ilevalasp 509

RESULT 2
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016)
US-09-193-562D-46

Alignment Scores:
Pred. No.:          5,73e-23           Length:          903
Score:              240.00             Matches:         49
Percent Similarity: 77.11%             Conservative:    15
Best Local Similarity: 59.04%           Mismatches:     17
Query Match:       49.48%               Indels:         2
DB:                4                   Gaps:          1

US-09-049-696-8 (1-253) x US-09-193-562D-46 (1-903)
      3 CAAGGTGGGCATCATCATCCACACAGCGCTTGGGGCCCTCGACGCTCAAGAAGTAGAG 62
        |||||
      430 GlnserGlyValIlelleHsthValAlaleuNglyProSerAlaAlalaYSglueNglu 449
        |||||

      63 GAGCTGTCCAATAATGACAGAGAGGTTTACAGACATATGTTTCAGATCAAGTTCAGAACAT 122
        |||||
      450 ThrLeuSerAspethrhnrglyGlnHisArgpheTyrlaAsnlysAspIle-----Asn 467
        |||||

      123 GGCCTATTGATGCTTTTGGGGCCCTTCATCAGAAATGAGAGCTGTCTCAGCGCTCC 182
        |||||
      468 GlyLeuThrAsnAlaPheSerArGlyIleSerSerArGlySerIlethrnglnInthr 487
        |||||

      183 ATCCACTTGAGATGAAGGATTACCCTCCAGAACCAAGCCAGTCGATGCAGTAGTG 242
        |||||
      488 IlleglnleugluserlysalaleuAlallethrGlulysystrypAlasnnglyThrVal 507
        |||||

      243 ATCGTGAC 251
        |||||
      508 ProValasp 510

RESULT 3
US-09-193-562D-34
; Sequence 34, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
```

```

1  APPLICANT: Pauli, Benedict U.
2  TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
3  TYPE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
4  FILE REFERENCE: 18617.0052
5  CURRENT APPLICATION NUMBER: US/09/193,562D
6  CURRENT FILING DATE: 1998-11-17
7  PRIOR APPLICATION NUMBER: US/60/065,922
8  PRIOR FILING DATE: 1997-11-17
9  NUMBER OF SEQ ID NOS: 47
10 SEQ ID NO 34
11 LENGTH: 902
12 TYPE: PRT
13 ORGANISM: Mus musculus
14 US-09-193-562D-34

```

Alignment Scores:		
Pred. No.:	3,46e-22	Length: 902
Score:	234.00	Matches: 48
Percent Similarity:	77.11%	Conservative: 16
Best Local Similarity:	57.83%	Mismatches: 17
Query Match:	48.25%	Indels: 2
DB:	4	Gaps: 1
US-09-049-696-8 (1-253) x US-09-193-562D-34 (1-902)		
QY	3 CAAGTGGTGGCCATCATCCACAGATGCGCTTGGGGCCCTTCAGAGCTCAAGACTAGAG 62	
Db	430 AATGGTGGTGGCCATCATCCACAGATGCGCTTGGGGCCCTTCAGAGCTCAAGACTAGAG 449	
QY	63 GAGGTGCCAAATACACAGAGAGTTTACACAGATATGCTTCAGATCAAGTTCAAGCAAT 122	
Db	450 TTTTAAATGAGTGGTGGGGCCCTTCATCCAGAGAAATGAGCTGTCTCAAGCGCTCC 182	
QY	123 GGGCCATGATGCTTGGGGCCCTTCATCCAGAGAAATGAGCTGTCTCAAGCGCTCC 182	
Db	468 SerlellleapalapheserArgrgleseerlrhrserglserValserlnglnAla 487	
QY	183 ATCCAGCTTGACAGTAAAGGATTAAACCTCCAGACAGCCAGTGGATGATGATGGACAGTG 242	
Db	488 lEeGlnlEeGlnserlYsAlaPhesapAlaArGlnAlaArTrPlleasnGlyThrVal 507	
QY	243 ATCGTGGAC 251	
Db	508 ProleuASP 510	
RESULT 4		
US-09-193-562D-30		
Sequence 30, Application US/09193562D		
Patent No. 6309857		
GENERAL INFORMATION:		
APPLICANT: Paul, Benedict H.		
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium		
FILE REFERENCE: 18617.0052		
CURRENT APPLICATION NUMBER: US/09/193.562D		
CURRENT FILING DATE: 1998-11-17		
PRIOR APPLICATION NUMBER: US/60/065.922		
PRIOR FILING DATE: 1997-11-17		
NUMBER OF SEQ ID NOS: 47		
SEQ ID NO 30		
LENGTH: 1000		
TYPE: PRT		
ORGANISM: Homo sapiens		
US-09-193-562D-30		
Alignment Scores:		
Pred. No.:	3,18e-20	Length: 1000
Score:	219.00	Matches: 48
Percent Similarity:	61.17%	Conservative: 15
Best Local Similarity:	46.60%	Mismatches: 18
Query Match:	45.15%	Indels: 22
DB:	4	Gaps: 2

US-09-049-696-8 (1-253) x US-09-193-562D-30 (1-1000)

```
QY 3 CAAAGTGGTCATCATCCACACAGTCGTTGGGCCCTCTGCAGCTCAAGAACTAGAG 62
    ||||||| :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 429 GlnserglYthrvallleHlsthrlleAlaleuclYProserAlaaspGluLeuGlu 448
QY 63 GAGCTGCCAAATGACAGG-----
    ||||||| |||||||
Db 449 ThrleuSerAsnMetThrlGlyleuHlsthrlscysTyrThrlnglUserSerTyrSer 468
QY 84 -----GTTTACAGACATATGCTTACATGATCAAGTTCAAGAACAT 122
    ||| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 469 AlaGlylYspherlePhecysGlyHlsArpHeThYrArpHeThYrArpHeThYrArpHeThYr 486
QY 123 GGCCTCATTTGATGCTTTGGGCCCTTTCATCAGGAATGGAGCGTCTGCAGCGCTCC 182
    ||||||| ||||||| :||||| :|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 487 GlyleuHlsArpAlaPheSerArGlleSerSerArGserGlySerlIleSerGlnGlnAla 506
QY 183 ATCCAGCTTGAGAGTAAGGATTAACCCCTCCAGAACAGCCAGATGATGACAGATG 242
    :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
507 LeuGlnleuGlnUserlYsThrlleuAsnHleProAlalYsYsTrpIleAsnGlyThrvAl 526
```

QY 243 ATCGTGCAC 251  
|||  
Db 527 ProValasp 529

## RESULT 5

US-09-193-562D-11  
; Sequence 11, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 11  
; LENGTH: 795  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells  
US-09-193-562D-11

Alignment Scores:  
; Score: 4.45e-19 Length: 795  
; Percent Similarity: 210.00 Matches: 44  
; Best Local Similarity: 74.70% Conservative: 18  
; Query Match: 43.30% Mismatches: 19  
; Indels: 2  
; Gaps: 1

US-09-049-696-8 (1-253) x US-09-193-562D-11 (1-795)

```
QY 3 CAAAGTGGTCATCATCCACACAGTCGTTGGGCCCTCTGCAGCTCAAGAACTAGAG 62
    :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 431 ArgserGlyAlaIlelleHlsthrlleAlaleuclYProserAlaAlalYsGluLeuGlu 450
QY 63 GAGCTGCCAAATGACAGGATTTACAGACATATGCTTCAAGTTCAGAACAT 122
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 451 ThrlySerAsnMetThrlGlylYrArpHeThYrArpHeThYrArpHeThYrArpHeThYrArpHeThYr 468
QY 123 GGCCTCATTTGATGCTTTGGGCCCTTTCATCAGGAATGGAGCGTCTGCAGCGCTCC 182
    ||||||| :||||| :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 469 GlyleuHlsArpAlaPheSerArGlleSerSerArGserGlySerlIleHrlnglnAla 488
QY 183 ATCCAGCTTGAGAGTAAGGATTAACCCCTCCAGAACAGCCAGATGATGACAGATG 242
    ||||||| ||| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 489 lleGlnleuGlnUserlYsAlaleuHlsIleHrlnglYrArGysArGValAsnGlyThrvAl 508
```

QY 243 ATCGTGCAC 251  
|||  
Db 509 ProValasp 511

## RESULT 6

US-09-193-562D-12  
; Sequence 12, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 12  
; LENGTH: 821  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells  
US-09-193-562D-12

Alignment Scores:  
; Score: 4.49e-19 Length: 821  
; Percent Similarity: 210.00 Matches: 44  
; Best Local Similarity: 74.70% Conservative: 18  
; Query Match: 43.30% Mismatches: 19  
; Indels: 2  
; Gaps: 1

US-09-049-696-8 (1-253) x US-09-193-562D-12 (1-821)

```
QY 3 CAAAGTGGTCATCATCCACACAGTCGTTGGGCCCTCTGCAGCTCAAGAACTAGAG 62
    :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 431 ArgserGlyAlaIlelleHlsthrlleAlaleuclYProserAlaAlalYsGluLeuGlu 450
QY 63 GAGCTGCCAAATGACAGGATTTACAGACATATGCTTCAAGTTCAGAACAT 122
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 451 ThrlySerAsnMetThrlGlylYrArpHeThYrArpHeThYrArpHeThYrArpHeThYrArpHeThYr 468
QY 123 GGCCTCATTTGATGCTTTGGGCCCTTTCATCAGGAATGGAGCTGTCTGCAGCGCTCC 182
    ||||||| :||||| :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 469 GlyleuHlsArpAlaPheSerArGlleSerSerArGserGlySerlIleHrlnglnAla 488
QY 183 ATCCAGCTTGAGAGTAAGGATTAACCCCTCCAGAACAGCCAGATGATGACAGATG 242
    ||||||| ||| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db 489 lleGlnleuGlnUserlYsAlaleuHlsIleHrlnglYrArGysArGValAsnGlyThrvAl 508
QY 243 ATCGTGCAC 251
    |||
Db 509 ProValasp 511
```

## RESULT 7

US-09-193-562D-2  
; Sequence 2, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 2  
; LENGTH: 905



LENGTH: 1507  
5268270-2

Alignment Scores:  
Pred. No.: 1.57 Length: 1507  
Score: 68.00 Matches: 22  
Percent Similarity: 40.26% Conservative: 9  
Best Local Similarity: 28.57% Mismatches: 38  
Query Match: 14.02% Indels: 8  
DB: 6 Gaps: 2

US-09-049-696-8 (1-253) x 5268270-2 (1-1507)

OY 18 ATCCACAGTCGCTTTGGGCGCCCTGCTGACGTACAGAACTAGAGAGAGCTGTCCAAATG 77  
Db 1196 ValGurthralaGlyLeuGlnPthArgAlaAlaGlnPthArgAlaAlaGln 1215  
OY 78 ACAGAGGCTTACAGACATATGCTTCAGATCAAGTTCAGAACAAATGGCCCTCATGATCT 137  
Db 1216 AlaSpAlaValSerThrAsnThr-----AanSerAlaLeuSerAspAla 1230  
OY 138 TTGGGGCCCTTCATCA-----GGAATGAGCTGTCTCTCAGCCCTCCATCCAG 188  
Db 1231 MetAlaSerThrGlnSerIleLeuLeuAspThrGlyAlaTyrLeuThrArgHisIleAla 1250  
OY 189 CTGAGAGTAGAGGATTAAACCTCCAGAACAGCCAGTGATGATGACACA 239  
Db 1251 GlnIysSerArgAlaAspAlaGlnIuLysAsnSerValTrpMetGluAsnThr 1267

RESULT 11  
US-08-713-298B-2  
Sequence 2, Application US/08713298B  
Patent No. 5922586  
GENERAL INFORMATION:  
APPLICANT: Outtrup, Helle  
APPLICANT: Dammann, Claus  
APPLICANT: Olsen, Arne  
APPLICANT: Bisg rd-Frantzen, Henrik  
APPLICANT: Sch lein, Martin  
APPLICANT: J rgensen, Per  
TITLE OF INVENTION: DNA Constructs and Methods of Producing  
TITLE OF INVENTION: Cellulytic Enzymes  
NUMBER OF SEQUENCES: 11  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: No. 5922586 No. 5922586disk of No. 5922586th America, Inc.  
STREET: 405 Lexington Avenue, Suite 6400  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10174-6401  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/713.298B  
FILING DATE: 13-SEPT-1996  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Gregg, Valeta A.  
REGISTRATION NUMBER: 35,127  
REFERENCE/DOCKET NUMBER: 3794.424-US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 867-0298  
TELEFAX: (212) 867-0298  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 400 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein

US-08-713-298B-2

Alignment Scores:  
Pred. No.: 2.06 Length: 400  
Score: 66.00 Matches: 16  
Percent Similarity: 58.70% Conservative: 11  
Best Local Similarity: 34.78% Mismatches: 15  
Query Match: 13.61% Indels: 4  
DB: 2 Gaps: 2

US-09-049-696-8 (1-253) x US-08-713-298B-2 (1-400)

OY 93 ACATAGCTTCAGATCAAGTTCAGAACATGGCCCTCATGTGCTTTGGGCGCCCTTCA 152  
Db 23 ThrThrAlaAlaAsp-----AanSpSerValValGlnIuHisGlyGlnLeuSer 39  
OY 153 TCAGAAATGGA---GCTGTCTCTCAGCGCTCCATCCAGCTTGAGACTGAGATTAAAC 209  
Db 40 IleSerAsnGlyIuLeuValAsnGluArgGlyIuGlnIuValGlnLeuLysGlyMetSer 59  
OY 210 CTCGAGAACAGCCAGTGG 227  
Db 60 SerHisGlyLeuGlnTrp 65

RESULT 12  
US-08-870-180B-2  
Sequence 2, Application US/08870180B  
Patent No. 5945327  
GENERAL INFORMATION:  
APPLICANT: Outtrup, Helle  
APPLICANT: Dammann, Claus  
APPLICANT: Olsen, Arne  
APPLICANT: Bisg rd-Frantzen, Henrik  
APPLICANT: Sch lein, Martin  
APPLICANT: J rgensen, Per  
TITLE OF INVENTION: DNA Constructs and Methods of Producing  
TITLE OF INVENTION: Cellulytic Enzymes  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: No. 5945327 No. 5945327disk of No. 5945327th America, Inc.  
STREET: 405 Lexington Avenue, Suite 6400  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10174-6401  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/870.180B  
FILING DATE: 6-June-1997  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Rozek, Carol E.  
REGISTRATION NUMBER: 36,993  
REFERENCE/DOCKET NUMBER: 3794.434-US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212 867 0123  
TELEFAX: 212 867 0298  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 400 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein

US-08-870-180B-2

Alignment Scores:  
Pred. No.: 2.06 Length: 400  
Score: 66.00 Matches: 16





QY 153 TCAGGAATGGA--GCTGCTCTCAGCGCTCCATCCAGCTTGAGAGTAAGGATTAAAC 209  
|||||  
Db 40 IleserasnnglygluleuValasngluarglygluInValglInleuLysglyMetSer 59  
|||  
QY 210 CTCGAGAAACGACCGAGTGG 227  
|||||  
Db 60 SerHisglyLeuGlnTrp 65

## RESULT 15

US-09-226-529-2  
; Sequence 2, Application US/09226529  
; Patent No. 6280984  
; GENERAL INFORMATION:  
; APPLICANT: Outtrup, Helle  
; APPLICANT: Dammann, Claus  
; APPLICANT: Olsen, Arne  
; APPLICANT: Bisg rd-Frantzen, Henrik  
; APPLICANT: Sch lein, Martin  
; APPLICANT: J rgensen, Per  
; APPLICANT: Bjoernvad, Mads  
; TITLE OF INVENTION: DNA Constructs and Methods of Producing  
; TITLE OF INVENTION: Cellulytic Enzymes  
; NUMBER OF SEQUENCES: 14  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: No. 6280984disk of No. 6280984th America, Inc.  
; STREET: 405 Lexington Avenue, Suite 6400  
; CITY: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 10174-6401  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/226,529  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/870,180  
; FILING DATE: 6-June-1997  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Rozek, Carol E.  
; REGISTRATION NUMBER: 36,993  
; REFERENCE/DOCKET NUMBER: 3794.434-US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 212 867 0123  
; TELEFAX: 212 867 0298  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 400 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-09-226-529-2

Alignment Scores:  
Pred. No.: 2.06 Length: 400  
Score: 66.00 Matches: 16  
Percent Similarity: 58.70% Conservative: 11  
Best Local Similarity: 34.78% Mismatches: 15  
Query Match: 13.61% Indels: 4  
DB: 4 Gaps: 2

US-09-049-696-8 (1-253) x US-09-226-529-2 (1-400)

QY 93 ACATATGCTTCAGATCAGATCAGACAATGCGCTCATGTGCTTTGGGCGCTTCA 152  
||| |||  
Db 23 ThrThrAlaAlaasp-----AsnAspSerValValGluGluHisglyInleuSer 39  
||| |||

QY 153 TCAGGAATGGA--GCTGCTCTCAGCGCTCCATCCAGCTTGAGAGTAAGGATTAAAC 209  
||||| |||  
||| |||

Db 40 IleserasnnglygluleuValasngluarglygluInValglInleuLysglyMetSer 59  
QY 210 CTCGAGAAACGACCGAGTGG 227  
|||  
Db 60 SerHisglyLeuGlnTrp 65

Search completed: October 17, 2002, 17:59:27  
Job time : 9.10632 secs

*This Page Blank (uspto)*

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 10.4135 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-7

Perfect score: 289  
Sequence: 1 GAATATCCAACTGATGAT.....AGCTGAGAGTAAGGATTA 289

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Cal number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing First 45 summaries

Database : Issued Patents\_NA:\*

1: /cgn2\_6/ptodata/2/lna/5A\_COMB.seq:\*  
2: /cgn2\_6/ptodata/2/lna/5B\_COMB.seq:\*  
3: /cgn2\_6/ptodata/2/lna/5A\_COMB.seq:\*  
4: /cgn2\_6/ptodata/2/lna/5B\_COMB.seq:\*  
5: /cgn2\_6/ptodata/2/lna/5C\_COMB.seq:\*  
6: /cgn2\_6/ptodata/2/lna/5D\_COMB.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	288	99.7	3007	4	US-09-193-562D-27
2	111	38.4	3317	4	US-09-193-562D-1
3	103	35.6	3022	4	US-09-193-562D-33
4	94.2	32.6	2970	4	US-09-193-562D-31
5	84.6	29.3	3418	4	US-09-193-562D-29
6	29	10.0	4821	3	US-08-813-374-1
7	28.6	9.9	9723	1	US-08-083-590A-21
8	28.6	9.9	9723	1	US-08-532-384-21
9	28	9.7	371	1	US-08-594-031-80
10	27.2	9.4	352	3	US-08-961-083-127
11	27.2	9.4	631	2	US-08-743-637B-30
12	27.2	9.4	631	2	US-08-526-840B-30
13	26.8	9.3	8133	1	US-08-480-604A-5
14	26.8	9.3	8133	2	US-08-405-496A-5
15	26.8	9.3	8133	4	US-08-915-136-5
16	26.8	9.3	37950	4	US-09-338-907-183
17	26.8	9.3	37950	4	US-09-218-207-183
18	26.6	9.2	371	3	US-08-659-188-24
19	26.6	9.2	371	3	US-08-655-227-24
20	26.6	9.2	371	3	US-08-655-227-24
21	26.6	9.2	371	4	US-09-398-326-24
22	26.6	9.2	578	4	US-08-991-789A-35
23	26.6	9.2	578	4	US-09-062-451-35
24	26.6	9.2	2305	3	US-08-526-136-1
25	26.6	9.2	2311	3	US-08-526-136-3
26	26.6	9.2	3872	2	US-08-331-081B-4
27	26.4	9.1	2706	2	US-08-454-549-1

c	28	26.4	9.1	2706	3	US-08-454-552-1	Sequence 1, Appl1
c	29	26.4	9.1	2706	3	US-08-676-351-1	Sequence 1, Appl1
c	30	26.4	9.1	72928	3	US-09-009-913-1	Sequence 1, Appl1
c	31	26.2	9.1	455	3	US-09-026-343-20	Sequence 20, Appl1
c	32	26.2	9.1	487	3	US-09-026-343-18	Sequence 18, Appl1
c	33	26.2	9.1	500	4	US-09-340-323A-2	Sequence 2, Appl1
c	34	26.2	9.1	1267	2	US-08-831-575-10	Sequence 10, Appl1
c	35	26.2	9.1	1943	2	US-08-831-575-10	Sequence 33, Appl1
c	36	26.2	9.1	2264	4	US-09-126-109-9	Sequence 9, Appl1
c	37	26	9.0	800	3	US-08-545-809A-55	Sequence 55, Appl1
c	38	26	9.0	1178	2	US-08-933-750C-88	Sequence 88, Appl1
c	39	26	9.0	1178	3	US-09-234-613-88	Sequence 88, Appl1
c	40	26	9.0	2401	1	US-08-480-346-1	Sequence 1, Appl1
c	41	26	9.0	2401	2	US-08-243-541-1	Sequence 1, Appl1
c	42	26	9.0	2401	2	US-08-480-344-1	Sequence 1, Appl1
c	43	26	9.0	2706	4	US-09-277-565-21	Sequence 21, Appl1
c	44	25.8	8.9	1515	4	US-09-292-768-5	Sequence 5, Appl1
c	45	25.8	8.9	7815	4	US-09-102-528-28	Sequence 28, Appl1

## ALIGNMENTS

RESULT 1	US-09-193-562D-27	Application US/09193562D
Sequence 27, Patent No. 6309857		
GENERAL INFORMATION:		
APPLICANT: Pauli, Benedict U.		
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium		
FILE REFERENCE: 18617.0052		
CURRENT APPLICATION NUMBER: US/09/193,562D		
CURRENT FILING DATE: 1998-11-17		
PRIOR APPLICATION NUMBER: US/60/065,922		
PRIOR FILING DATE: 1997-11-17		
NUMBER OF SEQ ID NOS: 47		
SEQ ID NO 27		
LENGTH: 3007		
TYPE: DNA		
ORGANISM: Homo sapiens		
US-09-193-562D-27		
Query Match	99.7%	Score 288; DB 4; Length 3007;
Best Local Similarity	99.7%	Pred. No. 1.5e-90;
Matches 288; Conservative	0;	Mismatches 1; Indels 0; Gaps 0;
QY 1	GAATATCCAACTGATGATCTGAATTTGCTGCTGACGGATGGGGAAGACACTAT	60
DB 1240	GAATATCCAACTGATGATCTGAATTTGCTGCTGACGGATGGGGAAGACACTAT	1299
QY 61	AAGTGGTCTTTAAGCAGGCTCAAAAGTNGTCCATCATCCACACAGTGGCTTGGG	120
DB 1300	AAGTGGTCTTTAAGCAGGCTCAAAAGTNGTCCATCATCCACACAGTGGCTTGGG	1359
QY 121	GCCTGCGAGCTCAAGACAGTGAAGAGGAGCTGCTCAAAATGACAGAGGTTTACAGATA	180
DB 1360	GCCTGCGAGCTCAAGACAGTGAAGAGGAGCTGCTCAAAATGACAGAGGTTTACAGATA	1419
QY 181	TGCTTCAGATCAAGTTCAGAACTGAGGAGCTGCTCAAAATGAGGAGGCTTTCATCAGG	240
DB 1420	TGCTTCAGATCAAGTTCAGAACTGAGGAGCTGCTCAAAATGAGGAGGCTTTCATCAGG	1479
QY 241	AAATGAGAGTCTCTCTGAGGCTTCATCCAGCTTGAAGAGTAAGGATTA 289	
DB 1480	AAATGAGAGTCTCTCTGAGGCTTCATCCAGCTTGAAGAGTAAGGATTA 1528	
RESULT 2	US-09-193-562D-1	Application US/09193562D
Sequence 1, Patent No. 6309857		
GENERAL INFORMATION:		







```

? INFORMATION FOR SEQ ID NO: 30:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 631 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: double
? TOPOLOGY: linear
? MOLECULE TYPE: DNA (genomic)
? ORIGINAL SOURCE:
? ORGANISM: Streptococcus pneumoniae
US-08-743-637B-30

Query Match
Best local Similarity 52.2%; Pred. No. 5.1;
Matches 59; Conservative 0; Mismatches 54; Indels 0; Gaps 0;

QY 33 TCGTACGATGGGAGACACACTATATAGGTGGCTTTAAGAGGTCAACAAAGTN 92
Db 182 TACTGCTGTTGATGACAGCCAAATATATGATATGCTTTCAAGAGGTCATGTGTC 241
QY 93 GTCCATATCCACACAGTCCTTTGGGGCCCTGTGCAGCTCAAGACTAGAG 145
Db 242 AATTCAACATCAATAGGGGAATTTCTGCTCGGAACCAAAATATTCAG 294

RESULT 12
US-08-526-840B-30
? Sequence 30, Application US/08526840B
? Patent No. 6001564
? GENERAL INFORMATION:
? APPLICANT: BERGERON, Michel G.
? APPLICANT: OUELLETTE, Marc
? TITLE OF INVENTION: SPECIFIC AND UNIVERSAL PROBES AND
? TITLE OF INVENTION: APPLICATION PRIMERS TO RAPIDLY DETECT AND IDENTIFY
? TITLE OF INVENTION: COMMON BACTERIAL PATHOGENS AND ANTIBIOTIC RESISTANCE
? TITLE OF INVENTION: FROM CLINICAL SPECIMENS FOR ROUTINE DIAGNOSIS IN ...
? NUMBER OF SEQUENCES: 177
? CORRESPONDENCE ADDRESSES:
? ADDRESSEE: O'CARLES & BRADY
? STREET: 411 East Wisconsin Avenue
? CITY: Milwaukee
? STATE: Wisconsin
? COUNTRY: USA
? ZIP: 53202-4497
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? COMPUTER: IBM PC compatible
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: PatentIn Release #1.0, Version #1.30
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/08/526,840B
? FILING DATE: 11-SEP-1995
? CLASSIFICATION: 435
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/304,732
? FILING DATE: 12-SEP-1994
? ATTORNEY/AGENT INFORMATION:
? NAME: BAKER, Jean C.
? REGISTRATION NUMBER: 35,433
? REFERENCE/DOCKET NUMBER: 850586,90012
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (414) 277-5000
? TELEFAX: (414) 277-5591
? INFORMATION FOR SEQ ID NO: 30:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 631 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: double
? TOPOLOGY: linear
? MOLECULE TYPE: DNA (genomic)
? ORIGINAL SOURCE:
? ORGANISM: Streptococcus pneumoniae
US-08-526-840B-30

```

Query Match 9.4%; Score 27.2; DB 3; Length 631;  
Best Local Similarity 52.2%; Pred. No. 5.1;  
Matches 59; Conservative 0; Mismatches 54; Indels 0; Gaps 0;

QY 33 TGCTGACGATGGGAGACACACTATAGTGGTCTTTACGAGGTCAACAAAGTN 92  
182 TACTGTGTTGATGACTGCCAAATATAGTATCTGTTCAAGAGGTCACTGTGTC 241  
QY 93 GTGCAATCATCCACACAGTCTGTGGGCCCTCTGCAGCTCAAGAACTAGAG 145  
242 AATTCAACATCCAAATGGGGAATTTCTGCTCGGAACCCAAATAATTCAG 294

RESULT 13  
US-08-480-604A-5  
Sequence 5, Application US/08480604A  
Patent No. 5736139

GENERAL INFORMATION:

APPLICANT: KINK, JOHN A.

APPLICANT: THALLEY, BRUCE S.

APPLICANT: PADHYE, NISHA V.

APPLICANT: FIRCA, JOSEPH R.

APPLICANT: STAFFORD, DOUGLAS C.

TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND

PREVENTION OF C. DIFFICILE DISEASE

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL, LLP

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/480,604A

FILING DATE: 07-JUN-1995

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/422,711

FILING DATE: 14-APR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/405,496

FILING DATE: 16-MAR-1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/329,154

FILING DATE: 25-OCT-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/161,907

FILING DATE: 02-DEC-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/985,321

FILING DATE: 04-DEC-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791

FILING DATE: 31-OCT-1989

ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.

REGISTRATION NUMBER: 40,027

REFERENCE/DOCKET NUMBER: OPND-01763

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 8133 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

FEATURE:

NAME/KEY: CDS

LOCATION: 1..8130

US-08-480-604A-5

Query Match 9.3%; Score 26.8; DB 1; Length 8133;

Best Local Similarity 57.0%; Pred. No. 26;

Matches 49; Conservative 0; Mismatches 37; Indels 0; Gaps 0;

QY 173 CAGACATATGCTTCAGATCAAGTTCAGACAGTCCATGATGCTTTGGGCCCTT 232  
1567 CACGCAAGTGCAGAAATATGATTTGAGAAATATGATAGATATGATGCTGCTCTT 1626  
QY 233 TCATCAGGAATGAGCTGTCTCA 258  
Db 1627 TCTGAAGACAATGGGGTGAAGCTTTAA 1652

RESULT 14  
US-08-405-496A-5  
Sequence 5, Application US/08405496A  
Patent No. 5919665

GENERAL INFORMATION:

APPLICANT: WILLIAMS, JAMES A.

TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM

PREVENTION OF NEUROTOXIN

NUMBER OF SEQUENCES: 30

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL, LLP

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: USA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/405,496A

FILING DATE: 16-MAR-1995

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/329,154

FILING DATE: 25-OCT-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/161,907

FILING DATE: 02-DEC-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/985,321

FILING DATE: 04-DEC-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/429,791

FILING DATE: 31-OCT-1989

ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.

REGISTRATION NUMBER: 40,027

REFERENCE/DOCKET NUMBER: OPND-01308

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 8133 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

FEATURE:

NAME/KEY: CDS



LOCATION: 1..8130  
US-08-405-496A-5

Query Match 9.3%; Score 26.8; DB 2; Length 8133;  
Best Local Similarity 57.0%; Pred. No. 26;  
Matches 49; Conservative 0; Mismatches 37; Indels 0; Gaps 0;

QY 173 CAGACATATGCTTCAGATCAAGTTCAGAACATGGCCCTCATGATGCTTTGGGCCCTT 232  
DB 1567 CAGCAGATGCAAAATATCAATTTGAGAAATATGTAAGAGATTAATCTGATGATCTCTT 1626  
QY 233 TCATCAGGAAATGAGCTGTCTCTCA 258  
DB 1627 TCTGAAGACAAATGGGGTAGACTTTAA 1652

RESULT 15  
US-08-915-136-5

Sequence 5, Application US/08915136  
Patent No. 6290960

GENERAL INFORMATION:

APPLICANT: KINK, JOHN A.  
APPLICANT: THALLEY, BRUCE S.  
APPLICANT: PADHYE, NISHA V.  
APPLICANT: FIRCA, JOSEPH R.  
APPLICANT: STAFFORD, DOUGLAS C.  
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND  
NUMBER OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE  
NUMBER OF SEQUENCES: 32  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: UNITED STATES OF AMERICA  
ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/915,136  
FILING DATE:

CLASSIFICATION:

Prior Application DATA:  
APPLICATION NUMBER: 08/480,604  
FILING DATE:

Prior Application DATA:

APPLICATION NUMBER: US 08/405,496  
FILING DATE: 16-MAR-1995

Prior Application DATA:

APPLICATION NUMBER: US 08/329,154  
FILING DATE: 25-OCT-1994

Prior Application DATA:

APPLICATION NUMBER: US 08/161,907  
FILING DATE: 02-DEC-1993

Prior Application DATA:

APPLICATION NUMBER: US 07/985,321  
FILING DATE: 04-DEC-1992

Prior Application DATA:

APPLICATION NUMBER: US 07/429,791  
FILING DATE: 31-OCT-1989

ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.  
REGISTRATION NUMBER: 40,027

REFERENCE/DOCKET NUMBER: OPD-01763

TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8133 base pairs

TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..8130  
US-08-915-136-5

Query Match 9.3%; Score 26.8; DB 4; Length 8133;  
Best Local Similarity 57.0%; Pred. No. 26;  
Matches 49; Conservative 0; Mismatches 37; Indels 0; Gaps 0;

QY 173 CAGACATATGCTTCAGATCAAGTTCAGAACATGGCCCTCATGATGCTTTGGGCCCTT 232  
DB 1567 CAGCAGATGCAAAATATCAATTTGAGAAATATGTAAGAGATTAATCTGATGATCTCTT 1626  
QY 233 TCATCAGGAAATGAGCTGTCTCTCA 258  
DB 1627 TCTGAAGACAAATGGGGTAGACTTTAA 1652

Search completed: October 17, 2002, 11:13:49  
Job time: 26.4135 secs

***This Page Blank (uspto)***

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Comphen Ltd.

## OM nucleic - protein search, using frame\_plus.n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 8.1175 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-7  
Perfect score: 531  
Sequence: 1 GAATATCACTGATGATGAT.....AGCTTGAGAGTAAAGGATTA 289

Scoring table: BIOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 segs, 24425594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters: -DEV=ylh  
-MODE=frame\_plus.n2p.model -DEV=ylh  
-Q=/cgn2\_1/USPTO\_SPOOL/US09049696/runat.16102002.115821.24739/app\_query.fasta\_1.13694  
-DB=Issued\_Patents\_AA-QFMT=fastan-SUFFIX=ra1-MINMATCH=0.1-LOOPCL=0  
-LOOPEXT=0-UNITS=bits-START=1-END=1-MATRIX=BIOSUM62-TRANS=human40.cdl  
-LIST=45-DOCALLIGN=200-THR\_SCORE=pct-THR\_MAX=100-THR\_MIN=0-ALIGN=15  
-MODE=LOCAL-OUTFMT=ptc-NORM=ext-HEAPSIZE=500-MINLEN=0-MAXLEN=2000000000  
-USER=US09049696-RCGN1.1.57-errnat.16102002.115821.24739-NCPU=6-ICPU=3  
-NO\_XLPPX-NO\_MAP-LARGEORDER-NEG\_SCORES=0-WAIT-LOGLOG-DEV\_TIMEOUT=120  
-WARN\_TIMEOUT=30-THREADS=1-XGAPOP=10-XGAPEXT=0.5-FGAPOP=6-FGAPEXT=7  
-XGAPOP=10-XGAPEXT=0.5-DELCP=6-DELEXT=7

## Database : Issued\_Patents\_AA:\*

- 1: /cgn2\_6/prodata/2/1aa/5A.COMB.pep:\*
- 2: /cgn2\_6/prodata/2/1aa/5B.COMB.pep:\*
- 3: /cgn2\_6/prodata/2/1aa/6A.COMB.pep:\*
- 4: /cgn2\_6/prodata/2/1aa/6B.COMB.pep:\*
- 5: /cgn2\_6/prodata/2/1aa/6CTUS.COMB.pep:\*
- 6: /cgn2\_6/prodata/2/1aa/Backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	472	88.9	914	4	US-09-193-562D-28
2	285	53.7	903	4	US-09-193-562D-46
3	281	52.9	902	4	US-09-193-562D-34
4	276	52.0	793	4	US-09-193-562D-11
5	276	52.0	821	4	US-09-193-562D-12
6	276	52.0	905	4	US-09-193-562D-2
7	262	49.3	1000	4	US-09-193-562D-30
8	218	41.1	943	4	US-09-193-562D-32
9	70.5	13.3	777	2	US-08-477-396A-4
10	68.5	12.9	212	2	US-08-477-396A-2
11	66.5	12.5	189	4	US-09-123-492A-1
12	66.5	12.5	779	1	US-08-426-627-4

13	66.5	12.5	779	1	US-08-426-627-24	Sequence 24, Appl
14	66.5	12.5	836	1	US-08-426-627-6	Sequence 6, Appl
15	66.5	12.5	837	1	US-08-426-627-23	Sequence 23, Appl
16	65	12.2	1437	2	US-09-061-400-2	Sequence 2, Appl
17	65	12.2	1453	2	US-09-001-273-2	Sequence 2, Appl
18	65	12.2	1453	4	US-08-843-459A-2	Sequence 2, Appl
19	64.5	12.1	151	2	US-08-387-942C-46	Sequence 46, Appl
20	64.5	12.1	997	2	US-08-387-942C-4	Sequence 4, Appl
21	62.5	11.8	1049	3	US-08-772-270A-11	Sequence 11, Appl
22	62.5	11.8	1244	5	PCR-US93-10500-2	Sequence 2, Appl
23	62	11.7	111	4	US-08-905-223-468	Sequence 468, App
24	62	11.7	3144	1	US-08-246-982A-6	Sequence 6, Appl
25	62	11.7	3144	1	US-08-453-265-6	Sequence 6, Appl
26	62	11.7	3144	2	US-08-457-273B-42	Sequence 42, Appl
27	62	11.7	3144	3	US-08-556-419-21	Sequence 21, Appl
28	62	11.7	3144	4	US-09-041-886-15	Sequence 15, Appl
29	61.5	11.6	330	4	US-09-188-930-125	Sequence 125, App
30	61.5	11.6	575	4	US-08-924-345-3	Sequence 3, Appl
31	61.5	11.6	617	1	US-08-191-866D-58	Sequence 58, Appl
32	61.5	11.6	617	2	US-08-185-949B-58	Sequence 58, Appl
33	61.5	11.6	617	4	US-09-188-930-303	Sequence 303, App
34	61.5	11.6	1229	4	US-09-310-293-2	Sequence 2, Appl
35	61.5	11.6	1229	4	US-09-579-376-2	Sequence 2, Appl
36	61	11.5	232	1	US-08-508-448C-19	Sequence 19, Appl
37	61	11.5	418	1	US-08-508-448C-25	Sequence 25, Appl
38	61	11.5	510	1	US-08-742-273-2	Sequence 2, Appl
39	60.5	11.4	153	2	US-08-387-942C-51	Sequence 51, Appl
40	60.5	11.4	872	2	US-08-387-942C-5	Sequence 5, Appl
41	60	11.3	368	4	US-08-818-112-114	Sequence 114, App
42	60	11.3	368	4	US-08-818-111-109	Sequence 109, App
43	60	11.3	368	4	US-09-056-556-114	Sequence 114, App
44	60	11.3	370	2	US-08-231-342-6	Sequence 6, Appl
45	60	11.3	378	2	US-09-055-097-1	Sequence 1, Appl

## ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
; Sequence 28, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 28  
; LENGTH: 914  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-28

Alignment Scores:  
Pred. No.: 1.13e-52 Length: 914  
Score: 472.00 Matches: 95  
Percent Similarity: 98.96 Conservative: 0  
Best Local Similarity: 98.96 Mismatches: 1  
Query Match: 88.894 Indels: 0  
DB: 4 Gaps: 0

US-09-049-696-7 (1-289) x US-09-193-562D-28 (1-914)

QY 2 AAATATCACTGATGATGATGAATTGCTGCTGACGATGGGAAGACACACTATA 61  
DB 399 LysTyrProThrAspIleSerGluIleValLeuLeuThrAspIleGluLysAsnThrIle 418  
QY 62 AGTGGTGCCTTAAACAGAGGTCAACAAAGTNGTCCATCATCCACACAGTGGCTTGGGG 121

```

Db 419 SerGlyCysPheAsnGluValIysGlnSerGlyAlaIleIleIsthrValAlaLeuGly 438
OY 122 CCCTCTGCAGCTCAAGAACTAGAGAGAGCTGCCAAATGACAGAGGTTTACACACTAT 181
Db 439 ProSerAlaAlaGlnGlnIleuGlnIleuSerIysMetThrGlyGlyLeuGlnThrTyr 458
OY 182 GCTTCAGATCAAGTTTCAGAACATGAGCTCATGATGCTTTGGGCGCTTCATCAGGA 241
Db 459 AlaSerAspGlnValGlnIleAsnAsnGlyLeuIleAspAlaPheGlyAlaLeuSerSerGly 478
OY 242 AATGAGAGCTGTCTCTCAGCGCTCCATCCAGCTTGAAGTAAGGATTA 289
Db 479 AsnGlyAlaValSerGlnArgSerIleGlnIleuGlnIleuSerGlyLeu 494

RESULT 2
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; CHANNEL OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-
US-09-193-562D-46

Alignment Scores:
Pred. No.: 1,66e-28 Length: 903
Score: 285.00 Matches: 59
Percent Similarity: 77.42% Conservative: 13
Best Local Similarity: 63.44% Mismatches: 19
Query Match: 53.67% Indels: 2
DB: Gaps: 1

US-09-049-696-7 (1-289) x US-09-193-562D-46 (1-903)
OY 11 ACTGATGATCTGAATTTGCTGCTGACGAGTGGGAAAGACACTATTAAGTGGTGC 70
Db 405 ThrSerGlySerGluIleIleLeuLeuThrAspGlyGlnAspAsnGlyIleHisSerCys 424
OY 71 TTTAAGCAGGTCACAAAGTNGTGCATGCATCCACACAGTGGTGGGCGCTTCGCA 130
Db 425 IleGlnIleValIysGlnSerGlyAlaIleIleIsthrValAlaLeuGlyProSerAla 444
OY 131 GCTCAGAACTAGAGAGAGCTGCCAAATGACAGAGGTTTACAGACATATGCTTCAGAT 190
Db 445 AlaIysGlnIleuGlnIleuSerAspMetThrGlyGlnIleAspRhetYrAlaAsnIys 464
OY 191 CAAGTTTCAGAACATGCGCTCATGATGCTTTGGGCGCTTCATCCAGGAATGAGAGCT 250
Db 465 AspIle-----AsnGlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySer 482
OY 251 GTCCTCAGCGCTCCATCCAGCTTGAAGTAAGGATTA 289
Db 483 IleThrGlnGlnIleThrIleGlnIleuGlnIleuSerIysAlaLeu 495

RESULT 3
US-09-193-562D-34
; Sequence 34, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:

```

```

; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; CHANNEL OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 34
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.: 5.47e-28 Length: 902
Score: 281.00 Matches: 59
Percent Similarity: 78.02% Conservative: 12
Best Local Similarity: 64.84% Mismatches: 18
Query Match: 52.92% Indels: 2
DB: Gaps: 1

US-09-049-696-7 (1-289) x US-09-193-562D-34 (1-902)
OY 11 ACTGATGATCTGAATTTGCTGCTGACGAGTGGGAAAGACACTATTAAGTGGTGC 70
Db 405 ThrSerGlySerGluIleValIleLeuLeuThrAspGlyGlnAspAsnGlyIleArgSerCys 424
OY 71 TTTAAGCAGGTCACAAAGTNGTGCATCCATCCACACAGGCTTTGGGCGCTTCGCA 130
Db 425 PheGlnAlaValSerArgSerGlyAlaIleIleIsthrIleAlaLeuGlyProSerArg 444
OY 131 GCTCAGAACTAGAGAGAGCTGCCAAATGACAGAGGTTTACAGACATATGCTTCAGAT 190
Db 445 AlaArgGlnIleuGlnIleuSerAspMetThrGlyGlnIleuArgPheYrAlaAsnIys 464
OY 191 CAAGTTTCAGAACATGCGCTCATGATGCTTTGGGCGCTTCATCCAGGAATGAGAGCT 250
Db 465 AspLeu-----AsnSerLeuIleAspAlaPheSerArgIleSerSerThrSerGlySer 482
OY 251 GTCCTCAGCGCTCCATCCAGCTTGAAGTAAGGATTA 283
Db 483 ValSerGlnGlnAlaLeuGlnIleuGlnIleuSerIys 493

RESULT 4
US-09-193-562D-11
; Sequence 11, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; CHANNEL OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 11
; LENGTH: 795
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

Alignment Scores:
Pred. No.: 2.34e-27 Length: 795
Score: 276.00 Matches: 55
Percent Similarity: 78.49% Conservative: 18
Best Local Similarity: 59.14% Mismatches: 18
Query Match: 51.98% Indels: 2

```

OY	11	ACTGATGGATTGAAGAAATGTCTCCTCGACGATGGGGAAGAACAACACTATTAAGTGGTC	70
Db	406	Thirsglysergullietleuleuthraspolyltunspasnlgullileasercys	422
OY	71	TTTAAAGAGGTCAACAACAAGTNGGCCATCATCCACACAGTGCTTTGGGGCCCTGC	133
Db	426	PheglusnspallyllysargsercylAlalIetlehlsthrIlealeuglyProserala	445
OY	131	GCTAAGAACATGAGAGAGCTGCCAAAATGACAGAGGTTTACAGACATATGCTTCAGAT	190
Db	446	AlAlsysgleuleugluThrLysSerAsnmethrilyglylytraArgPhephelaAAsnllys	465
OY	191	CAAGTTCAGAACAAATGGCCCTATGATGCTTTTGGGGCCCTTCACAGGAATAAGGAC	250
Db	466	Aspile-----ThnglyleuthrAsnalphebeermrglieserSerArgserglySer	485
OY	251	GTCCTCAGCGCTCCATCCAGCTTGAGAGTAGGAGTAA	289

Oy	11	ACTATGAGTATTGAATAATTTGGCTCCACGAGTGGGAACAACAACCTAATATGGGTGC	70
Db	406	ThrsrglyserglutllelleuleuthrAspelylunspansgullleasnSerCys	425
Oy	71	TTTAACGAGTCAAACAAGAAGTGTCATCATCCACACAGTCGCTTTGGGCCCTCGCA	130
Db	426	PheclunspVallylsArgserGlyAlaIlelleHsthrllealaenglyProserAla	445
Oy	131	GCTCACAGACATAGAGGAGCGCTCCAAAATGACAGAGAGCTTTAACGACATATGCTTCAGAT	190
Db	446	AlalysgluleugluthrLysSerAsnMetThrClglyLyrratGphepnelelaasLys	465
Oy	191	CAAGTTCAGAACAAATGGCCCTATTGATGCTTTTGGGGCCCTTTCATCAGGAAATGGAGCT	250
Db	466	Aspile-----ThrGlyLeuthrAsnalpHeSerargyleSerSerarglySer	483
Oy	251	GTCCTCAGCGCTCCATCCAGCTTGAGAGAGAGAGATTA	289
Db	484	IlethrGlunglnAlaleglinleuglSerLysAlaleu	496

```

RESULT 7 -562D-30
US-09-193-562D-30
Sequence 30, Application US/09193562D
Patent No. 6309857
GENERAL INFORMATION:
APPLICANT: Pauli, Benedicht U
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
FILE REFERENCE: 18617.0052
CURRENT APPLICATION NUMBER: US/09/193,562D
CURRENT FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US/60/065,922
PRIOR FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 30
LENGTH: 1000
TYPE: PRT
ORGANISM: Homo sapiens

```





```

Y 119 GCGGCCCTCTGCA-----GCTCAAGACTGAGAGGCTGTCACAAATGACA-----163
      |||||:::||||| ||| |||::: |||||:::|||||
Db 108 GlyProThrAlaLeuAlaHisGluIleIleYcysIleSerIysValIThrIHisPro 127
      164 -----GGAGGTTTACGACATATGCTTCAGATCAAGTTCAG 199
Db 128 LeuAlaIysAspIysMetMetAsnGlyGlyHisIleThrIleIleIleIleHisPro 147
      :::|||||:::||||| |||||::: |||||::: |||||:::
Y 200 AACAAATGCGCTCATTT 214
Db 148 LysAspGlyLeuIle 152

RESULT 12
US-08-426-627-4
: Sequence 4, Application US/08426627
: Patent No. 5756664
: GENERAL INFORMATION:
: APPLICANT: Amann, Egon
: APPLICANT: Otawara-Hamamoto, Yoko
: APPLICANT: Kikuno, Reiko
: APPLICANT: Takeshita, Sunao
: APPLICANT: Tezuka, Kenichi
: TITLE OF INVENTION: No. 5756664el Protein with Bone Formation
: TITLE OF INVENTION: Ability and Process for Its Production.
: NUMBER OF SEQUENCES: 24
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Flinnegan, Henderson, Farabow, Garrett &
: ADDRESSEE: Dunner
: STREET: 1300 I Street, N.W.
: CITY: Washington
: STATE: D.C.
: COUNTRY: USA
: ZIP: 20005-3315
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/426.627
: FILING DATE:
: CLASSIFICATION: 435
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/036,841
: FILING DATE: 25-MAR-1993
: APPLICATION NUMBER: JP 4-71501
: FILING DATE: 27-MAR-1992
: ATTORNEY/AGENT INFORMATION:
: NAME: Hammond, Alan W.
: REGISTRATION NUMBER: 35,178
: REFERENCE/DOCKET NUMBER: 02481-1285-00000
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 202-408-4000
: TELEFAX: 202-408-4400
: INFORMATION FOR SEQ ID NO: 4:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 779 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-08-426-627-4

Alignment Scores:
Pred. No.: 2.78 Length: 779
Score: 66.50 Matches: 25
Percent Similarity: 47.47% Conservative: 22
Best Local Similarity: 25.25% Mismatches: 37
Query Match: 12.52% Indels: 15
DB: 1 Gaps: 4

US-09-049-696-7 (1-289) x US-08-426-627-4 (1-779)
Y 14 GATGATTCGAATTTGTGCTGCTGACGAGATGGGAGACACACTTAAGTGGGTGC---70

```

```

Db      325 GI0GIYASNTHTIIIEGLIUIIEGICYASGIYASSETIIETHTHVALASNGIYIIIEYS 344
QY      71 -----TTTAAAGAGCTCAAAACAAGTGTGTCATCATATCCACACAGTC-----GCT 115
Db      345 MetValAsnLysAlaSpIleValThrAsnAsnGlyValIleHisIleuIleAspGlnVal 364
QY      116 TTGGGGCCCTTCGCAGCTCAGAGACTGAGAGCTGTCCAAAATGACAGGAGGTTTACAG 175
Db      365 LeuIleProAspSerAlaLysGlnValIleGluIleuAla-----GlyLysGln 381
QY      176 ACATATGCTTCGATCAGATTCAGACAAATGGCCCTCATTTATGCT----- 220
Db      382 ThrThrPheThrAspLeuValAlaGlnLeuGlyLeuAlaSerAlaLeuArgProAspGly 401
QY      221 ---TTTGGGGCCCTTCATCATCAGAAATGAGAGCTGTCTCAGAGGCTCCATCCAGCTT 274
Db      402 GluIuYThrLeuAlaProValAsnAsnAlaPheSerAspThrLeuSerMet 420

RESULT 13
US-08-426-627-24
Sequence 24, Application US/08426627
Patent No. 5756664
GENERAL INFORMATION:
APPLICANT: Amann, Egon
APPLICANT: Olawara-Hamamoto, Yoko
APPLICANT: Kikuno, Reiko
APPLICANT: Takeshita, Sunao
APPLICANT: Tezuka, Kenichi
TITLE OF INVENTION: No. 5756664el Protein with Bone Formation
TITLE OF INVENTION: Ability and Process for Its Production.
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/426,627
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/036,841
FILING DATE: 25-MAR-1993
APPLICATION NUMBER: JP 4-71501
FILING DATE: 27-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Hammond, Alan W.
REGISTRATION NUMBER: 35,178
REFERENCE/DOCKET NUMBER: 02481-1285-00000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEO ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 779 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-426-627-24

Alignment Scores:
Pred. No.: 2.78 Length: 779
Score: 66.50 Matches: 25
Percent Similarity: 47.478 Conservative: 22

```





TELEPHONE: 202-408-4000  
TELEFAX: 202-408-4400  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 837 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-426-627-23

Alignment Scores:  
Pred. No.: 2.84 Length: 837  
Score: 66.50 Matches: 25  
Percent Similarity: 47.47% Conservative: 22  
Best Local Similarity: 25.25% Mismatches: 37  
Query Match: 12.52% Indels: 15  
DB: 1 Gaps: 4

US-09-049-696-7 (1-289) x US-08-426-627-23 (1-837)

14 GATGATCTGAAATGTCCTGCTGACGATGGGCAAGACACATATAAGTCGTGC--- 70  
:::||||::: ||| ::| |||||::: ||| |||::: |||  
325 GIUGLYASNTHRIIEGLIIEGLYCYSASPGIYASPSERIETHRVAlASngLYTleLys 344  
DB: 71 -----TTTACGAGGTCAAACCAAGTNGGCCATCATCCACACAGTC-----GCT 115  
QY ::::: ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::|  
Db 345 MetValAsnLysLysAspLleValThrAsnAsngLYValIleHisLeuIleAspGlnVal 364  
QY 116 TTGGGGCCCTCTGCAGCTCAAGAACTAGAGAGCTGTCCAAATGACAGAGGTTTACAG 175  
||| ||| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::| ::|  
Db 365 LeuIleProAspSeraLalysGlnValIleGlnLeuAla-----GlySGlnGln 381  
QY 176 ACATATGCTTCAGATCAGTTCAGAACAAATGAGCTCATTTGATGCT----- 220  
||| ||| ::| ::| ||| ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Db 382 ThrThrPheThrAspLeuValalaglInleuGlyLeuAlaSerAlaLeuAlaArgProAspGly 401  
QY 221 ---TTTGGGGCCCTTTCATCAGAAATGAGCTGTCTCAGCGCTCCATCCAGCTT 274  
::: ||| ::| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||  
Db 402 GluTyrThrLeuLeuAlaProValAsnAsnAlaPheSerAspAspThrLeuSerMet 420

Search completed: October 17, 2002, 17:59:25  
Job time : 12.1175 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 8.25149 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-10

Perfect score: 229

Sequence: 1 GGCACAGTATCGTGCAGAC.....AACCTTGACCCCTGACTGCA 229

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

Number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_MA:\*

1: /cgn2\_6/ptodata/2/1na/5A.COMB.seq:\*  
2: /cgn2\_6/ptodata/2/1na/5B.COMB.seq:\*  
3: /cgn2\_6/ptodata/2/1na/6A.COMB.seq:\*  
4: /cgn2\_6/ptodata/2/1na/6B.COMB.seq:\*  
5: /cgn2\_6/ptodata/2/1na/PCRTUS.COMB.seq:\*  
6: /cgn2\_6/ptodata/2/1na/backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Match Length	DB	ID	Description
1	229	100.0	3007	4	US-09-193-562D-27
2	63.8	27.9	3317	4	US-09-193-562D-1
3	53.6	23.4	3022	4	US-09-193-562D-33
4	52.6	23.0	3418	4	US-09-193-562D-29
5	34.2	14.9	2970	4	US-09-193-562D-31
6	31.6	13.8	4771	3	US-08-840-062-3
7	29.6	12.9	1437	6	5187077-16
8	29.6	12.9	1437	6	5427925-14
9	29	12.7	1123	3	US-09-188-930-28
10	29	12.7	1123	3	US-09-188-930-203
11	27	11.8	1029	4	US-09-116-498-5
12	26.6	11.6	1920	4	US-08-186-222-1
13	26.4	11.5	2830	1	US-07-882-292-1
14	26.4	11.5	2830	1	US-08-331-644-1
15	26.4	11.5	2830	5	PCT-US93-04102-1
16	26.2	11.4	2061	3	US-09-020-033-1
17	26	11.4	688	3	US-09-027-381-1
18	26	11.4	688	4	US-09-477-071-1
19	26	11.4	920	4	US-08-860-174A-3
20	26	11.4	920	4	US-09-171-025-24
21	26	11.4	996	2	US-08-894-922A-6
22	26	11.4	999	4	US-08-860-174A-6
23	26	11.4	999	4	US-09-171-025-25
24	26	11.4	3267	3	US-08-633-768A-3
25	26	11.4	3664	1	US-08-148-675A-1
26	26	11.4	5438	4	US-08-456-200B-5
27	26	11.4	246240	2	US-08-724-394A-20

28	26	11.4	246240	2	US-08-724-394A-21	Sequence 21, Appl
29	26	11.4	246240	2	US-08-724-394A-22	Sequence 22, Appl
30	25.8	11.3	661	4	US-08-998-416-1100	Sequence 1100, Ap
31	25.8	11.3	683	4	US-09-328-111-704	Sequence 704, App
32	25.8	11.3	10348	2	US-08-457-273B-41	Sequence 41, Appl
33	25.8	11.3	10348	3	US-08-556-419-13	Sequence 13, Appl
34	25.8	11.3	10348	4	US-09-041-886-14	Sequence 14, Appl
35	25.8	11.3	10366	1	US-08-246-982A-5	Sequence 5, Appl
36	25.8	11.3	10366	1	US-08-453-265-5	Sequence 5, Appl
37	25.6	11.2	1088	1	US-08-726-525-3	Sequence 3, Appl
38	25.6	11.2	1088	1	US-08-487-942-3	Sequence 3, Appl
39	25.6	11.2	1088	2	US-08-726-036A-3	Sequence 3, Appl
40	25.6	11.2	1088	4	US-09-083-516-3	Sequence 3, Appl
41	25.6	11.2	1036	4	US-09-086-912-1	Sequence 1, Appl
42	25.4	11.1	1037	4	US-09-116-498-3	Sequence 3, Appl
43	25.4	11.1	1468	3	US-09-215-131-2	Sequence 2, Appl
44	25.4	11.1	1468	3	US-09-222-734-2	Sequence 2, Appl
45	25.4	11.1	2268	2	US-08-890-853-1	Sequence 1, Appl

#### ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
: Sequence 27, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE REFERENCE: 18617.0052
: CURRENT FILING DATE: 1997-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 27
: LENGTH: 3007
: TYPE: DNA
: ORGANISM: Homo sapiens
: US-09-193-562D-27

Query Match      100.0%; Score 229; DB 4; Length 3007;
Best Local Similarity 100.0%; Pred. No. 1.6e-74;
Matches 229; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGCACAGTATCGTGCAGACGCGTGGGAAGACACTTTGTTTATCACCCTGGACA 60
    |||
Db 1556 GGCACAGTATCGTGCAGACGCGTGGGAAGACACTTTGTTTATCACCCTGGACA 1615

QY 61 ACGCAGCTCCCAAAATCTCTGTGGAGTCCAGTGGACGAAGAAGAGTGCGCTTGTA 120
    |||
Db 1616 ACGCAGCTCCCAAAATCTCTGTGGAGTCCAGTGGACGAAGAAGAGTGCGCTTGTA 1675

QY 121 GTGACAAAACACCAAAATGCGTACCTCAATCCAGGACTTGTAAGCTGGCACT 180
    |||
Db 1676 GTGACAAAACACCAAAATGCGTACCTCAATCCAGGACTTGTAAGCTGGCACT 1735

QY 181 TGGAAATACAGTGTGCAAGCAAGCTGCAAACTTGACCTGACTGCA 229
    |||
Db 1736 TGGAAATACAGTGTGCAAGCAAGCTGCAAACTTGACCTGACTGCA 1784

RESULT 2
US-09-193-562D-1
: Sequence 1, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE REFERENCE: 18617.0052
```

CURRENT APPLICATION NUMBER: US/09/193,562D  
 CURRENT FILING DATE: 1998-11-17  
 PRIOR APPLICATION NUMBER: US/60/065,922  
 PRIOR FILING DATE: 1997-11-17  
 NUMBER OF SEQ ID NOS: 47  
 SEQ ID NO 1  
 LENGTH: 3317  
 TYPE: DNA  
 ORGANISM: Unknown  
 FEATURE:  
 OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated  
 OTHER INFORMATION: protein from bovine endothelial cells  
 US-09-193-562D-1

Query Match	27.9%	Score 63.8;	DB 4;	length 3317;
Best Local Similarity	60.9%	Pred. No. 1.4e-13;		
Matches 126; Conservative	0;	Mismatches 72;	Indels 9;	Gaps 1.

[illegible]

```

RESULT 3
US-09-193-562D-33
: Sequence 33. Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 33
: LENGTH: 3022
: TYPE: DNA
: ORGANISM: Mus musculus
US-09-193-562D-33

```

Query Match	23.4%	Score 53.6	DB 4	Length 3022
Best Local Similarity	58.5%	Pred. NO. 7.8e-10		
Matches 117, Conservative	0	Mismatches 74	Indels 9	Gaps 1

QY 1 GGCACAGATGCTGAGACAGACCCCTGGGAAAGAACCTTTGTTTATTCACCTGGACA 60  
 || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
 Db 1530 GGTACAGTACCTCTGAGCAGTACCGCTGCCACAGACACGTTCTTTGTATACCTGATG 1589  
 QY 61 ACGCAGCCTCCCAAAATCTTCTGSGATCCAGTGGACAGAAACA-----AGT 111  
 || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
 Db 1590 GTAAAAAAGCCGGAATCATTTCTCAAGATCCAAAAAATTAACAACCTCAAT 1649  
 || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
 QY 112 GGCCTTGTAGTGGACAAAACACAAAATGGCCCTACCTCCAAATCCACAGCATGCTAAG 171  
 || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
 Db 1650 TTCCAGATGATAAACTAAATCCGGCTCTGTAGACTTCAATACGGGCACTGGAGAG 1709  
 || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
 QY 172 GTTGGCACTGGAAATACAG 191  
 || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Db 1710 ACAGGTA CTGGACTTACAG 1729

RESULT 4  
US-09-193-562D-29  
; Sequence 29, Application US/09193562D  
; Patent No. 6309857

```

1  APPLICANT: Pauli, Benedict U.
2  TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
3  TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
4  FILE REFERENCE: 18617.0052
5  CURRENT APPLICATION NUMBER: US/09/193,562D
6  CURRENT FILING DATE: 1998-11-17
7  PRIOR APPLICATION NUMBER: US/60/065,922
8  PRIOR FILING DATE: 1997-11-17
9  NUMBER OF SEQ ID NOS: 47
10 SEQ ID NO 29
11     LENGTH: 3418
12     TYPE: DNA
13     ORGANISM: Homo sapiens
14     US-09-193-562D-29

```

Query Match	23.0%	Score 52.6;	DB 4:	Length 3418;
Best Local Similarity	57.5%	Pred. No. 1.9e+09;		
Matches 119; Conservative	0;	Mismatches 79;	Indels 9;	Gaps 1;

QY	1	GGCACGATCGTGGACACGACCCGTGGGAAAGACACATTGTTTATTCACATGGGACA	60
Db	1588	GGTACAGGCTGTGGATATGACAGTTAGAAAATGATACTTCTTTTGTTCACATGACAG	1644
QY	61	ACGCAGCCTCCCAAAATCTCTCTGTGGATCCCATGGACAGAACGACGGTGGCTTGT-	119
Db	1648	ATACAAAAGCCACGAAATATTTCTTCAAGATCCAAAAGAAAAAATATACTACCTCAGAT	1707
QY	120	-----AGTGGCAAAAACACCAAAATGGCCTACCTCCAATCCCAAGCATGTGCTAAG	171
Db	1708	TTTCAAGAAGGTGAACAAATATTCGGCTCGCCCGCTTCGATTACCAGATATTCGAGAG	1767
QY	172	GTGGTGGACTTGGAAATACAGTCTGCAA	198
Db	1768	ACAGGCACTTGGACTTACAGGTTTGA	1794

```

RESULT 5
US-09-193-562D-31
; Sequence 31, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 31
; LENGTH: 2970
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-193-562D-31

```

Query Match	14.98;	Score 34.2;	DB 4;	Length 2970;
Best Local Similarity	76.48;	Pred. No. 0.011;		
Matches 42;	Conservative	0;	Mismatches 13;	Indels 0;
				Gaps 0;

Qy 3 CACAGTGCCTGGACGACCCTGGGAAAGACACTTTGTTCATACACCTGG 57  
||||||| ||||| | ||||| ||||| ||||| ||||| |||||  
Db 1644 CACAGTACTGTGATAATACACTGTGGCGAACGACACTATTCTTCACTTACCTGG 1698

```

RESULT 6
US-08-840-062-3
Sequence 3, Application US/08840062
Patent No. 611797
GENERAL INFORMATION:
APPLICANT: LASKY, LAURENCE A.
APPLICANT: WU, KAI
TITLE OF INVENTION: TYPE C LECTINS
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/840,062
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Dieger, Ginger R.
REGISTRATION NUMBER: 33,055
REFERENCE/DOCKET NUMBER: P1019R1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-3216
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 4771 base pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
US-08-840-062-3

Query Match 13.8%; Score 31.6; DB 3: Length 4771;
Best Local Similarity 53.2%; Pred. No. 0.13;
Matches 67; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

OY 25 GTGGGAAGACACTTTGTTCTTATCACTGGACAAGCAGCCTCCCAATCCTTC 84
||||| ||||| ||||| || ||||| || ||||| |||||
3154 GTGGAGCAGGAGCCTTTGATGATCCAACTGGGAGCAGCTGGGGAGCCCTTTGGCCCTTAC 3213

OY 85 TGGGATCCCACTGGACAACAAGCAAGGTGGCTTTGATGTGGACAAAAACCAAAAATGGCC 144
||||| ||||| ||||| ||||| ||||| ||||| |||||
DB 3214 CCTGCTCCCACTGGACAACAACCGACGAGCTGTGGGTGCTCTGCACAGCCCTCAGGCC 3273
OY 145 TACCTC 150
|| ||
DB 3274 CACTTC 3279

RESULT 7
5187077-16/c
Patent No. 5187077
APPLICANT: GEARING, DAVID P.; GOUGH, NICHOLAS M.; HILTON,
DOUGLAS J.; KING, JULIE A.; METCALF, DONALD; NICE, EDOUARD C.;
NICOLA, NICOS A.; SIMPSON, RICHARD J.; WILSON, TRACY A.
TITLE OF INVENTION: LEUKEMIA INHIBITORY FACTOR
NUMBER OF SEQUENCES: 41
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/294,514
FILING DATE: 09-DEC-1988
SEQ ID NO: 16;
LENGTH: 1437
5187077-16

```

```

Query Match          12.9%; Score 29.6; DB 6; Length 1437;
Best Local Similarity 61.8%; Pred. No. 0.38;
Matches 47; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

OY 59 CAACGACGCTCCCAAAATCCTTCTGTGGATCCAGTGGACAGAGAAGCAAGGTGGCTTTG 118
      111 1111111111111111111111111111111111111111111111111111111
Db 1098 CAACCAAGCCTTCCAAAGTTTCTGTGAGAGACAGCAAGAGCAGACAGATGATGTGACTCTG 1039

OY 119 TAGTGGACAAAAACAC 134
      1111111111111111111111111111111111111111111111111111111
Db 1038 TAGGGGTCTAGGACAC 1023

RESULT 8
5427925-14/c
; Patent No. 5427925
; APPLICANT: GEARING, DAVID P.; GOUGH, NICHOLAS M.; HILLTON,
; DOUGLAS J.; KING, JULIE A.; METCALF, DONALD; NICE, EDWARD C.
; NICOLA, NICOS A.; SIMPSON, RICHARD J.; WILSON, TRACY A.
; TITLE OF INVENTION: RECOMBINANT METHOD FOR MAKING
; LEUKEMIA INHIBITOR FACTOR
; NUMBER OF SEQUENCES: 38
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/58,979
; FILING DATE: 06-MAY-1993
; APPLICATION NUMBER: 948,614
; FILING DATE: 22-SEP-1992
; APPLICATION NUMBER: 667,159
; FILING DATE: 11-MAR-1991
; SEQ ID NO:14:
; LENGTH: 1437
; 5427925-14

Query Match          12.9%; Score 29.6; DB 6; Length 1437;
Best Local Similarity 61.8%; Pred. No. 0.38;
Matches 47; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

OY 59 CAACGACGCTCCCAAAATCCTTCTGTGGATCCAGTGGACAGAGAAGCAAGGTGGCTTTG 118
      1111111111111111111111111111111111111111111111111111111
Db 1098 CAACCAAGCCTTCCAAAGTTTCTGTGAGAGACAGCAAGAGCAGACAGATGATGTGACTCTG 1039

OY 119 TAGTGGACAAAAACAC 134
      1111111111111111111111111111111111111111111111111111111
Db 1038 TAGGGGTCTAGGACAC 1023

RESULT 9
US-09-188-930-28
; Sequence 28, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Ornst, Rene
; APPLICANT: Murlson, James Gred
; TITLE OF INVENTION: Compositions Isolated From Skin Cells
; TITLE OF INVENTION: and Methods For Their Use
; FILE REFERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188,930A
; CURRENT FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 348
; SOFTWARE: PasteSeq for Windows Version 3.0
; SEQ ID NO 28
; LENGTH: 1123
; TYPE: DNA
; ORGANISM: Rat
US-09-188-930-28

Query Match          12.7%; Score 29; DB 3; Length 1123;
Best Local Similarity 63.8%; Pred. No. 0.55;
Matches 44; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

```

QY 127 AAAACACCAAAATGGCTACTCTCAAAATCCAGCATTCCTAAGTTGGCAGTTGGAAA 186  
DB 767 AACAAAGGAAATCATCATCATCCAGCAACCATGCACTGCTGAAGTTGGCCAAAGGAGA 826  
QY 187 TACAGTCTG 195  
DB 827 TGAAGTCTG 835

## RESULT 10

US-09-188-930-203  
Sequence 203, Application US/09188930A  
Patent No. 6150502  
GENERAL INFORMATION:  
APPLICANT: Watson, James D.  
APPLICANT: Strachan, Lorna  
APPLICANT: Sleeman, Matthew  
APPLICANT: Onrust, Rene  
APPLICANT: Murison, James Greg  
TITLE OF INVENTION: Compositions Isolated From Skin Cells  
FILE REFERENCE: 11000.1011c1  
CURRENT APPLICATION NUMBER: US/09/188,930A  
NUMBER OF SEQ ID NOS: 348  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 203  
LENGTH: 1123  
TYPE: DNA  
ORGANISM: Rat  
US-09-188-930-203

Query Match  
Best local Similarity 12.7%; Score 29; DB 3; Length 1123;  
Matches 44; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

QY 127 AAAACACCAAAATGGCTACTCTCAAAATCCAGCATTCCTAAGTTGGCAGTTGGAAA 186  
DB 767 AACAAAGGAAATCATCATCATCCAGCAACCATGCACTGCTGAAGTTGGCCAAAGGAGA 826  
QY 187 TACAGTCTG 195  
DB 827 TGAAGTCTG 835

## RESULT 11

US-09-116-498-5/c  
Sequence 5, Application US/09116498  
Patent No. 6251582

## GENERAL INFORMATION:

APPLICANT: Liltman, Dan R.  
Deng, Hongkui  
Unutmaz, Derya  
Ramanul, Vineet N.K.  
TITLE OF INVENTION: NOVEL ALTERNATIVE G-COUPLED RECEPTORS  
ASSOCIATED WITH RETROVIRAL ENTRY INTO CELLS, METHODS OF  
IDENTIFYING THE SAME, AND DIAGNOSTIC AND THERAPEUTIC USES  
THEREOF  
NUMBER OF SEQUENCES: 18  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: David A. Jackson, Esq.  
STREET: 411 Hackensack Ave, Continental Plaza, 4th  
Floor  
CITY: Hackensack  
STATE: New Jersey  
COUNTRY: USA  
ZIP: 07601

## COMPUTER READABLE FORM:

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/116,498  
FILING DATE: 16-Jul-1998  
CLASSIFICATION: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Jackson Esq., David A.  
REGISTRATION NUMBER: 26,742  
REFERENCE/DOCKET NUMBER: 1049-1-009  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-487-5800  
TELEFAX: 201-343-1684

## INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:  
LENGTH: 1029 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
HYPOTHETICAL: NO  
ORIGINAL SOURCE:

ORGANISM: pigtail macaque  
SEQUENCE DESCRIPTION: SEQ ID NO: 5:

US-09-116-498-5

Query Match  
Best local Similarity 11.8%; Score 27; DB 4; Length 1029;  
Matches 69; Conservative 0; Mismatches 70; Indels 0; Gaps 0;

QY 63 GCAGCTCCCAATCTCTCTGGGATCCCATGTGACAGACCAAGTGGCTTTGACT 122  
DB 613 GCAGTGGCAAGAACCCAGTGTCTATGGTGGCAAGACCAAGTGGAAATCTCT 554  
QY 123 GGACAAACCAACCAAAATGGCTACTCTCAAAATCCAGCATTCCTAAGTTGGCAGTTG 182  
DB 553 TGTGATGATATACCAATATAGCTGTGTCCAGATTAAAGCATTTGCCATATATTTGGG 494  
QY 183 GAAATACAGTCTGCAAGCA 201  
DB 493 GCAAGGAACACAGCAGGGA 475

## RESULT 12

US-08-186-222-1  
Sequence 1, Application US/08186222  
Patent No. 5559007

## GENERAL INFORMATION:

APPLICANT: Surli, Bruno  
Schmitz, Albert  
TITLE OF INVENTION: Bacterial Vectors  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/186,222  
FILING DATE:

## CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/672,205

FILING DATE: 19-MAR-1991  
APPLICATION NUMBER: GB 9006400.7

FILING DATE: 22-MAR-1990  
ATTORNEY/AGENT INFORMATION:

NAME: Villamizar, Joann  
REGISTRATION NUMBER: 30,598

REFERENCE/DOCKET NUMBER: 4-17994/A  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (914)785-7121  
TELEFAX: (914)347-5769  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1920 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
ORIGINAL SOURCE:  
ORGANISM: Lactococcus lactis IM0230  
INDIVIDUAL ISOLATE: Major Secretion Product (MSP) Gene  
IMMEDIATE SOURCE:  
CLONE: pUCRS  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 411..1793  
-08-186-222-1  
Query Match  
Best Local Similarity 11.6%; Score 26.6; DB 1; Length 1920;  
Matches 50; Conservative 0; Mismatches 39; Indels 0; Gaps 0;  
QY 128 AAAACACCAATGCGCTACCTCCAAATCCAGCATGCTGAGTTGGCACTTGAAT 187  
DB 631 AATGCTTAATTCGAAGCCGACGTAAGCTTAATGCTCAAAATGCTACTTGAACG 690  
QY 188 ACAGTCTGCAAGCAAGCTCACAACCTTG 216  
DB 691 AAGTATCAAGACGTACAAAGACATG 719

RESULT 13  
US-07-882-292-1/C  
Sequence 1, Application US/07882292  
Patent No. 5324638  
GENERAL INFORMATION:  
APPLICANT: Tao, Wufan  
APPLICANT: Lai, Eseng  
TITLE OF INVENTION: BRAIN TRANSCRIPTION FACTOR, NUCLEIC ACIDS  
TITLE OF INVENTION: ENCODING SAME AND USES THEREOF  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: John P. White  
STREET: C/O Cooper and Dunham, 30 Rockefeller  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10112  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.24  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/882,292  
FILING DATE: 19920513  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: White, John P  
REGISTRATION NUMBER: 28,678  
REFERENCE/DOCKET NUMBER: 41472  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-977-9550  
TELEFAX: 212-664-0525  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2830 base pairs  
TYPE: NUCLEIC ACID

STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
HYPOTHETICAL: N  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 443..1882  
OTHER INFORMATION:  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: 926..1255  
OTHER INFORMATION: /note="nucleotide sequence encoding DNA  
OTHER INFORMATION: binding domain homology"  
FEATURE:  
NAME/KEY: misc\_signal  
LOCATION: 1883..1885  
OTHER INFORMATION: /note="translation termination codon"  
US-07-882-292-1  
Query Match  
Best Local Similarity 11.5%; Score 26.4; DB 1; Length 2830;  
Matches 51; Conservative 0; Mismatches 41; Indels 0; Gaps 0;  
QY 101 AGACGACAGTGGCTTGTGAGTGACAAACACCAAAATGCGCTACCTCCAAATCCAG 160  
DB 2599 AAAATTAAGTACCTGTAGTACACATACATGAAATATATACACACAACTGAAG 2540  
QY 161 GCATTGCTAAGTTGGCACTTGGAATACAGT 192  
DB 2539 GCAATCCTTAATTTGCTCCTTCGATTCAT 2508

RESULT 14  
US-08-331-644-1/C  
Sequence 1, Application US/08331644  
Patent No. 5976872  
GENERAL INFORMATION:  
APPLICANT: Tao, Wufan  
APPLICANT: Lai, Eseng  
TITLE OF INVENTION: BRAIN TRANSCRIPTION FACTOR, NUCLEIC  
TITLE OF INVENTION: ACIDS ENCODING SAME AND USES THEREOF  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Cooper & Dunham  
STREET: 1185 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/331,644  
FILING DATE:  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/882,292  
FILING DATE: 13-MAY-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: White, John P.  
REGISTRATION NUMBER: 28,678  
REFERENCE/DOCKET NUMBER: 41472-A-PCT-US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-278-0400  
TELEFAX: 212-391-0525  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2830 base pairs  
TYPE: nucleic acid

```

STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: N
ANTI-SENSE: N
FEATURE:
NAME/KEY: CDS
LOCATION: 443..1882
OTHER INFORMATION:
FEATURE:
NAME/KEY: misc_feature
LOCATION: 926..1255
OTHER INFORMATION: /note="nucleotide sequence encoding DNA binding domain"
OTHER INFORMATION: homology"
FEATURE:
NAME/KEY: misc_signal
LOCATION: 1883..1885
OTHER INFORMATION: /note="translation termination codon"
08-331-644-1
Query Match 11.5%; Score 26.4; DB 2; Length 2830;
Best Local Similarity 55.4%; Pred. No. 8.1;
Matches 51; Conservative 0; Mismatches 41; Indels 0; Gaps 0;
QY 101 AGAGCAAGGTGGCTTGTAGTGACAAACCAAAATGGCTACCTCCAAATCCAG 160
DB 2599 AAAAATRAAGTGCCTGTAGTGACCAACATCGAAATATACACACAAACGAG 2540
QY 161 GCATTGCTAAGTTGGCCTTGGAATACAGT 192
DB 2539 GCAATCCTTAATTTGTCTTGGATTCAT 2508

RESULT 15
PCT-US93-04102-1/C
; Sequence 1, Application .PC/TUS9304102
; GENERAL INFORMATION:
; APPLICANT: Tao, Wufan
; APPLICANT: Lai, Eseng
; TITLE OF INVENTION: BRAIN TRANSCRIPTION FACTOR, NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING SAME AND USES THEREOF
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: John P. White
; STREET: c/o Cooper and Dunham, 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/04102
; FILING DATE: 19930430
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/882,292
; FILING DATE: 13-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41472A-PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-977-9550
; TELEFAX: 212-664-0525
; TELEX: 422523 COOP UI
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:

```

```

LENGTH: 2830 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: N
ANTI-SENSE: N
FEATURE:
NAME/KEY: CDS
LOCATION: 443..1882
OTHER INFORMATION:
FEATURE:
NAME/KEY: misc_feature
LOCATION: 926..1255
OTHER INFORMATION: /note="nucleotide sequence encoding DNA binding domain homology"
OTHER INFORMATION: binding domain homology"
FEATURE:
NAME/KEY: misc_signal
LOCATION: 1883..1885
OTHER INFORMATION: /note="translation termination codon"
PCT-US93-04102-1
Query Match 11.5%; Score 26.4; DB 5; Length 2830;
Best Local Similarity 55.4%; Pred. No. 8.1;
Matches 51; Conservative 0; Mismatches 41; Indels 0; Gaps 0;
QY 101 AGAGCAAGGTGGCTTGTAGTGACAAACCAAAATGGCTACCTCCAAATCCAG 160
DB 2599 AAAAATRAAGTGCCTGTAGTGACCAACATCGAAATATACACACAAACGAG 2540
QY 161 GCATTGCTAAGTTGGCCTTGGAATACAGT 192
DB 2539 GCAATCCTTAATTTGTCTTGGATTCAT 2508

```

Search completed: October 17, 2002, 11:14:19  
 Job time : 17.2515 secs



GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 6.43221 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-10  
Perfect score: 432  
Sequence: 1 GGCACAGTGCATGTCGACAG.....AACCTGACCCCTGACCTCA 229

Scoring table:  
BIOSUM62  
Xgapop 10.0 , Ygapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 seqs, 24425594 residues  
Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:  
-MODEL=frame+n2p model -DEV=rlh  
-Q=/cgn2\_1/USPRO.spool/US09049696/runat\_16102002\_115821\_24739/app\_query.fasta\_1.13694  
-DB=issued.patents\_AA -QPM=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blomsum62 -TRANS=human40.cdi  
-LIST=45 -DOCCALIGN=200 -THR.SCORE=pct -THR.MAX=100 -THR.MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-USER=US09049696 @CGN.1.1.57 @runat\_16102002\_115821\_24739 -NCPU=6 -ICPU=3  
-NO.XLPHY -NO.MMAP -LARGEOURRY -NEC\_SCORES=0 -WAIT -LONGLOG -DEV.TIMEOUT=120  
-MARK.TIMEOUT=30 -THREADS=1 -XGAPOP=10 -YGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued Patents AA:\*

- 1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*
- 2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*
- 3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*
- 4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*
- 5: /cgn2\_6/ptodata/2/1aa/PTCUS.COMB.pep:\*
- 6: /cgn2\_6/ptodata/2/1aa/backfile1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	396	51.7	914	4	US-09-193-562D-28
2	219	50.7	795	4	US-09-193-562D-11
3	219	50.7	821	4	US-09-193-562D-12
4	219	50.7	905	4	US-09-193-562D-2
5	205	47.5	903	4	US-09-193-562D-46
6	190	44.0	902	4	US-09-193-562D-34
7	179	41.4	1000	4	US-09-193-562D-30
8	162	37.5	943	4	US-09-193-562D-32
9	67	15.5	241	1	US-08-235-838-11
10	67	15.5	241	2	US-08-465-473B-11
11	67	15.5	637	1	US-08-235-838-16
12	67	15.5	637	2	US-08-465-473B-16

13	66	15.3	635	4	US-08-506-296B-71	Sequence 71, Appl
14	65	15.0	119	2	US-08-800-198-2	Sequence 2, Appl
15	65	15.0	119	3	US-09-296-595-2	Sequence 2, Appl
16	65	15.0	240	3	US-08-800-198-8	Sequence 8, Appl
17	65	15.0	540	3	US-09-296-595-8	Sequence 8, Appl
18	65	15.0	503	2	US-08-724-281-2	Sequence 2, Appl
19	64.5	15.2	718	2	US-08-560-398-12	Sequence 12, Appl
20	63	14.6	288	5	PCT-US94-03744-4	Sequence 4, Appl
21	62	14.6	102	4	US-09-461-697-441	Sequence 441, App
22	62	14.4	117	4	US-08-290-552E-18	Sequence 18, Appl
23	62	14.4	117	4	US-08-525-539A-78	Sequence 78, Appl
24	62	14.4	117	5	PCT-US95-10053-15	Sequence 15, Appl
25	62	14.4	117	5	PCT-US96-09448-18	Sequence 18, Appl
26	62	14.4	136	4	US-08-525-539A-63	Sequence 63, Appl
27	62	14.4	172	4	US-08-858-207A-499	Sequence 499, App
28	61.5	14.2	94	1	US-08-450-945-63	Sequence 63, Appl
29	61.5	14.2	94	4	US-08-976-161-63	Sequence 63, Appl
30	61	14.1	92	2	US-08-341-843B-33	Sequence 33, Appl
31	61	14.1	92	2	US-08-427-497E-38	Sequence 38, Appl
32	61	14.1	210	4	US-09-227-357-195	Sequence 195, App
33	61	14.1	278	5	PCT-US94-03744-2	Sequence 2, Appl
34	61	14.1	1266	4	US-08-506-296B-4	Sequence 4, Appl
35	61	14.1	1430	3	US-09-008-172-2	Sequence 2, Appl
36	61	14.1	1430	4	US-09-210-361-6	Sequence 6, Appl
37	60.5	14.0	118	2	US-08-116-247-10	Sequence 10, Appl
38	60.5	14.3	231	3	US-08-771-098-2	Sequence 2, Appl
39	60.5	14.3	231	3	US-09-022-875-4	Sequence 4, Appl
40	60.5	14.3	231	4	US-09-354-040-2	Sequence 2, Appl
41	60	13.9	108	2	US-08-440-354-4	Sequence 4, Appl
42	60	13.9	108	2	US-08-463-087-4	Sequence 4, Appl
43	60	13.9	363	3	US-08-506-296B-60	Sequence 60, Appl
44	60	13.9	363	3	US-08-881-771A-4	Sequence 4, Appl
45	60	13.9	380	3	US-08-971-782-4	Sequence 4, Appl

## ALIGNMENTS

```
RESULT 1
US-09-193-562D-28
: Sequence 28, Application US/09193562D
: Patent No. 6509857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT FILING DATE: US/09/193,562D
: PRIOR APPLICATION NUMBER: 1998-11-17
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 28
: LENGTH: 914
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-193-562D-28

Alignment Scores:
Pred. No.: 6.08e-41 Length: 914
Score: 396.00 Matches: 76
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 91.67% Indels: 0
Gaps: 0

US-09-049-696-10 (1-229) x US-09-193-562D-28 (1-914)
OY 1 GGCACAGTGCATGTCGACAGCCGTGGGAAGACACTTTGTTTATCAGCTGACACA 60
DB 504 GYTHrVallllevaIsPserThrValGlyLysaspHrLeuPheLeuIleThrTprH 523
OY 61 ACGCAGCCTCCCAATCTCTCTGCGATCCAGTGCAGCAAGCAAGTGCGTTGTA 120
|||||
```

Db 524 ThrGlnProProGlnIleLeuLeuTrpAspProSerGlyGlnGlyGlyPheVal 543  
Qy 121 GTGGCAAAAACACCAAAATGGCTACCTCCAAATCCAGCATGTTGATGGACAT 180  
Db 544 ValAspLysAsnThrLysMetAlaTrpLeuGlnIleProGlyIleAlaLysValGlyThr 563  
Qy 181 TCGAATACAGTCTGCAACAGCTCACAAACCTTGACCTGACTGTC 228  
Db 564 TrpLysTyrSerLeuGlnIleAspSerGlnThrLeuThrVal 579

RESULT 2  
US-09-193-562D-11  
; Sequence 11, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47

Alignment Scores:  
Pred. No.: 5.17e-19 Length: 795  
Score: 219.00 Matches: 49  
Percent Similarity: 69.51% Conservative: 8  
Best Local Similarity: 59.76% Mismatches: 19  
Query Match: 50.69% Indels: 6  
DB: 4 Gaps: 3

US-09-049-696-10 (1-229) x US-09-193-562D-11 (1-795)

Qy 1 GGCACAGTGAATCGTGGACAGCCGTGGAAAGACACTTGTTCATACCTGGACA 60  
Db 506 GLyThrValProValAspSerThrValGlyAsnSprhrPhePheValValThrTrpThr 525  
Qy 61 ACGCAGCTCCCAATCTCTCTGAGATCCAGTGACAG-----AAGCAAGTGCC 114  
Db 526 IleGlnLysProGlnIleValLeuGlnAspProLysGlyLysTyrLysThrSerAsp 545  
Qy 115 TTGTAGTGGACAAA---AACACCAAAATGGCTACCTCCAAATCCAGCATGCTAAG 171  
Db 546 PheLysGlnAspLysLeuAsnIleArgSerAlaArgLeuGlnIleProGlyIleAlaGlu 565  
Qy 172 GTTGGCACTTGAATACAGTCTG-----CAAGCAAGCTCACAAACCTTGACCTG 222  
Db 566 ThrGlyThrTrpThrTyrSerLeuLeuAsnAsnHisAlaSerSerGlnMetLeuThrVal 585  
Qy 223 ACTGTC 228  
Db 586 ThrVal 587

RESULT 3  
US-09-193-562D-12  
; Sequence 12, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT FILING DATE: 1998-11-17  
; CURRENT FILING DATE: 1998-11-17

Alignment Scores:  
Pred. No.: 5.21e-19 Length: 821  
Score: 219.00 Matches: 49  
Percent Similarity: 69.51% Conservative: 8  
Best Local Similarity: 59.76% Mismatches: 19  
Query Match: 50.69% Indels: 6  
DB: 4 Gaps: 3

US-09-049-696-10 (1-229) x US-09-193-562D-12 (1-821)

Qy 1 GGCACAGTGAATCGTGGACAGCCGTGGAAAGACACTTGTTCATACCTGGACA 60  
Db 506 GLyThrValProValAspSerThrValGlyAsnSprhrPhePheValValThrTrpThr 525  
Qy 61 ACGCAGCTCCCAATCTCTCTGAGATCCAGTGACAG-----AAGCAAGTGCC 114  
Db 526 IleGlnLysProGlnIleValLeuGlnAspProLysGlyLysTyrLysThrSerAsp 545  
Qy 115 TTGTAGTGGACAAA---AACACCAAAATGGCTACCTCCAAATCCAGCATGCTAAG 171  
Db 546 PheLysGlnAspLysLeuAsnIleArgSerAlaArgLeuGlnIleProGlyIleAlaGlu 565  
Qy 172 GTTGGCACTTGAATACAGTCTG-----CAAGCAAGCTCACAAACCTTGACCTG 222  
Db 566 ThrGlyThrTrpThrTyrSerLeuLeuAsnAsnHisAlaSerSerGlnMetLeuThrVal 585  
Qy 223 ACTGTC 228  
Db 586 ThrVal 587

RESULT 4  
US-09-193-562D-2  
; Sequence 2, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47

Alignment Scores:  
Pred. No.: 5.35e-19 Length: 905  
Score: 219.00 Matches: 49  
Percent Similarity: 69.51% Conservative: 8  
Best Local Similarity: 59.76% Mismatches: 19  
Query Match: 50.69% Indels: 6  
DB: 4 Gaps: 3

US-09-049-696-10 (1-229) x US-09-193-562D-2 (1-905)



DB:	4	Gaps:	3
-----	---	-------	---

US-09-049-696-10 (1-229) X US-09-193-562D-30 (1-1000,

[illegible]

## RESULT 8

```

US-09-193-562D-32
: Sequence 32, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 32
: LENGTH: 943
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-193-562D-32

```

Alignment Scores:	
Pred. No.:	6,32e-12
Score:	162.00
Percent Similarity:	60.49%
Best Local Similarity:	45.68%
Query Match:	37,50%
4	
Gaps:	3
length:	943
Matches:	37
Conservative:	12
Mismatches:	26
Indels:	
4	

US-09-049-696-10 (1-229) x US-09-193-562D-32 (1-943)

```

QY      4  ACGATGATGCTGGACAGCACCCTGGGAAAGACACTTGTGTTCTTACCACTGG---ACA 60
Db      513  TTTValTthValAspSntThValIslYasnsnPrpIseLpHeLseValTthTrpGlnAla 532
QY      61  ACGCACCTCCGCCAATCCTTCTCTGGGATCCCACTGGACAGANG-----CAAGTGGC 114
Db      533  SerGlpProProGlnIleIleLeuPheAspProAspGlyArgLysTYTYTYThAsnAsn 555
QY      115  TTTGTATGGACAAAACACCAAAATGGCGTCACTCCCAATGCCAGGATGCTAAGTT 174
Db      553  PheIthThAsnLeuThrPheArgThAlaSerLeuTrpIleProGlyThAlaLysPro 572
QY      175  GGCACCTGGAAATACAGTGTG-----CAAGCAAGCTCACAAACCTTGACCTGACT 225
Db      573  GlyHisTrpThrLysThLeuAsnSntThHisHisSerLeuGlnAlaLeuLysValThr 592
QY      226  GTC 228
Db      593  Val 593

```

## RESULT 9

US-08-235-838-11  
; Sequence 11, Application US/08235838  
; Patent No. 5571894

1. APPLICANT: Wells, Manfred S.  
 2. APPLICANT: Hynes, Nancy E.  
 3. APPLICANT: Harwerth, Ina-Maria  
 4. APPLICANT: Groner, Bernd  
 5. APPLICANT: Rateman, No. 5571894man  
 6. APPLICANT: Zwaickl, Markus  
 7. TITLE OF INVENTION: Recombinant Antihodies Specific for a  
 8. TITLE OF INVENTION: Growth Factor Receptor  
 9. NUMBER OF SEQUENCES: 16

ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA

```

1  COMPUTER READABLE FORM:
2  MEDIUM TYPE: Floppy disk
3  COMPUTER: IBM PC compatible
4  OPERATING SYSTEM: PC-DOS/MS-DOS
5  SOFTWARE: PatentIn Release #1.0, Version #1.25

```

APPLICATION NUMBER: US/08/235,838

FILING DATE: TBA

CLASSIFICATION: 435  
; PRIOR APPLICATION DATA ;

APPLICANT NUMBER:  
PRIOR APPLICATION DATA  
;

FILING DATE: 31-JAN-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 91-810079.3

FILING DATE: 05-FEB-1991

NAME: Elmer, James Scott

REGISTRATION NUMBER: 36,

REFERENCE/DOCKET NUMBER:

TELECOMMUNICATION INFORMATION ;  
TEL: (010) 641-9614  
FAX: (010) 641-9614

TELEPHONE: (919) 541-8614  
TELEFAX: (919) 541-8689

TELEFAX: (515) 244 0000  
INFORMATION FOR SEQ ID NO: 1

SEQUENCE CHARACTERISTICS:

LENGTH: 241 amino acids

TYPE: amino acid

MOLECULE TYPE: protein

MOLECULE LIFE. protein  
HS-08-235-838-11

C  
C  
C  
C  
C  
F  
F

Alignment Scores:

Pred. No.:	2.63
------------	------

Alignment Scores:	
Pred. No.:	2.63
Score:	67.00
Percent Similarity:	37.14%
Best Local Similarity:	22.86%
Query Match:	15.51%
DB:	1
	5
Length:	24
Matches:	24
Conservative:	37
Mismatches:	36
Indels:	30
Gaps:	5

US-09-049-696-10 (1-229) x US-08-235-838-11 (1-241)

```
QY      1 GGCACAGTATCGTGACACGACCCTGGAAAGGAC-----ACATTTCCTTATC 51
        |||||   ::|    |||          |||         |||       :
Db      16 GLYTHSerValIeuSerCysLysAlaSerAspTYrThrPheThrSerTYrPheT 35
QY      52 ACCTGGACAACGCAG---CCGCCCAAAATCCTTCTGTG-----GATGCCAGT 96
        |||     |||    |||         |||         |||       |
Db      36 AsnTrpValLyscIarProGlyngIyLeuGIutrpIIeGlyMetIleAspProser 55
QY      97 GGACACAGG-----CAAGGTGGCTTGTAGTGGACAAA 129
        ::|     |||    |||         |||         |||       |
Db      56 AspSerGIutHncItyrAsnGlnmetPheLysAspLysAlaIalaLeuThrValAspLys 75
```

QY 130 AACACCAAAAGGCGCTACCTCCAAATCCAGCATTTGCTAAG----- 171  
Db 76 SerSerAnThraLaTyMeGlnLeuSerSerLeuThrSerGluAspSeraLaValTyr 95  
QY 172 -----GTTGGCAGCTTGAAATACACTCTGCAGCAAGCTCACAA 210  
Db 96 TyrCysAlaLysGlyGlyAlaSerGlyAspTrpTyrPheAspValTrpGlyGlnGlyThr 115  
QY 211 ACCTTGACCTTGACT 225  
Db 116 ThrValThrValSer 120  
RESULT 10  
US-08-465-473B-11  
Sequence 11, Application US/08465473B  
Patent No. 5939531  
GENERAL INFORMATION:  
APPLICANT: Wels, Winfried S.  
APPLICANT: Hynes, Nancy E.  
APPLICANT: Harwerth, Ina-Maria  
APPLICANT: Groner, Bernd  
APPLICANT: Hardman, No. 5939531man  
TITLE OF INVENTION: Recombinant Antibodies Specific for a  
TITLE OF INVENTION: Growth Factor Receptor  
NUMBER OF SEQUENCES: 34  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: NOVARTIS Corporation  
STREET: 564 Morris Avenue  
CITY: Summit  
STATE: New Jersey  
COUNTRY: USA  
ZIP: 07901-6940  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/465,473B  
FILING DATE: 5 June 1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/828,832  
FILING DATE: 31-JAN-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 91-810079.3  
FILING DATE: 05-FEB-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Pfeiffer, Heena J.  
REGISTRATION NUMBER: 22,640  
REFERENCE/DOCKET NUMBER: 4-18518/A/CIP/CONT2  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (908)522 6940  
TELEFAX: (908)522 6955  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 241 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-465-473B-11  
Alignment Scores:  
Pred. No.: 2.63 Length: 241  
Score: 67.00 Matches: 24  
Percent Similarity: 37.14% Conservative: 15  
Best Local Similarity: 22.86% Mismatches: 36  
Query Match: 15.51% Indels: 30  
DB: 2 Gaps: 5  
US-09-049-696-10 (1-229) x US-08-465-473B-11 (1-241)

QY 1 GGCACAGTGAATCGTGACAGCACCCTGGAAAGAC-----ACTTGTCTTATTC 51  
Db 16 GlyThrSerValLysLysLeuSerCysLysAlaSerAspTyrThrPheThrSerTyrTrpMet 35  
QY 52 ACCTGGACACGACGAG--CCTCCCAATCTCTCTG-----GATCCAGT 96  
Db 36 AsnTrpValLysGlnArgProGlyGlnGlyLeuLutrpIleGlyMetIleAspProSer 55  
QY 97 GGACAGAAAG-----CAAGGTGGCTTTGTGTGGACAA 129  
Db 56 AspSerGluThrGlnTyrAsnGlnMetPheLysAspLysAlaAlaLeuThrValAspLys 75  
QY 130 AACACCAAAATGGCGCTACCTCCAAATCCAGCATTTGCTAAG----- 171  
Db 76 SerSerAnThraLaTyMeGlnLeuSerSerLeuThrSerGluAspSeraLaValTyr 95  
QY 172 -----GTTGGCAGCTTGAAATACACTCTGCAGCAAGCTCACAA 210  
Db 96 TyrCysAlaLysGlyGlyAlaSerGlyAspTrpTyrPheAspValTrpGlyGlnGlyThr 115  
QY 211 ACCTTGACCTTGACT 225  
Db 116 ThrValThrValSer 120  
RESULT 11  
US-08-235-838-16  
Sequence 16, Application US/08235838  
Patent No. 5571894  
GENERAL INFORMATION:  
APPLICANT: Wels, Winfried S.  
APPLICANT: Hynes, Nancy E.  
APPLICANT: Harwerth, Ina-Maria  
APPLICANT: Groner, Bernd  
APPLICANT: Hardman, No. 5571894man  
TITLE OF INVENTION: Recombinant Antibodies Specific for a  
TITLE OF INVENTION: Growth Factor Receptor  
NUMBER OF SEQUENCES: 16  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/235,838  
FILING DATE: TBA  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/828,832  
FILING DATE: 31-JAN-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 91-810079.3  
FILING DATE: 05-FEB-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: 4-18518/A/CIP/CONT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 637 amino acids  
TYPE: amino acid  
TOPOLOGY: linear

MOLECULE TYPE: protein  
US-08-235-838-16

US-08-235-838-16

Alignment Scores:	
Pred. No.:	3.42
Score:	67.00
Percent Similarity:	37.14%
Best Local Similarity:	22.86%
Query Match:	15.51%
DB:	1
Length:	637
Matches:	24
Conservative:	15
Mismatches:	36
Indels:	30
Gaps:	5

US-09-049-696-10 (1-229) x US-08-235-838-16 (1-637)

```

Oy      1  GGACAGGATGTCGGACGACACCGTGGAAAGAC-----ACTTTGCTTTATAC  51
         ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      47  GYIYrSerValLysIleuSerCysLysAlaSerAspIYrThrPheThrSerTYrTrpMet  66
         ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Oy      52  ACCGTGACACACGACG--CGTCCCAAAATCCTTCTGCG-----GATCCACG  96
         ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      67  AsnTrpValLysGlnArgProGlyGlnGlyLeuGlnIuTrpIleGlyMetIleAspProSer  86
         ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
         :::: ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Oy      97  GGACAGGAG-----CAAGGTGGCTTTGATGACGACAAA  129
         ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      87  AspSerGluThrGlnTYrAsnGlnMetSerPheLysAspLysAlaAlaLeuThrValAspLys  106
         ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Oy      130 AACACCCAAAAGCGCTACCTCCAAATCCCAAGCATGTGTAAG-----  171
         ::::: ||||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      107 SerSerAsnThrAlaTYrMetGlnLeuSerSerLeuThrSerGluAspSerAlaValTYr  126
         ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Oy      172 -----GTTGGCACTTGGAATCTCACTCTGCACGAAGCTGCACAA  210
         ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      127 TYrCysAlaLysGlyGlyAlaSerGlyAspTrpTYrPheAspValTYrGlyGlnGlyThr  146
         ||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Oy      211 ACCTTGACCCCTGACT  225
         |||:::||||:::
Db      147 ThrValThrValSer  151
         ||||| ||| ||| ||| ||| ||| ||| ||| ||| |||

```

RESULT 12  
US-08-465-473B-16

```

: GENERAL INFORMATION:
: APPLICANT: Wels, Manfred S.
: APPLICANT: Hynes, Nancy E.
: APPLICANT: Harwerth, Ina-Maria
: APPLICANT: Groner, Bernd
: APPLICANT: Hardman, No. 5939531man
: APPLICANT: Zwickl, Markus
: TITLE OF INVENTION: Recombinant Antibodies Specific for a
: TITLE OF INVENTION: Growth Factor Receptor
: NUMBER OF SEQUENCES: 34
: CORRESPONDENCE ADDRESS:

```

```

? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? OPERATING SYSTEM: IBM PC compatible
? SOFTWARE: PatentIn Release #1.0, Version #1.23
? CURRENT APPLICATION DATE:
? APPLICATION NUMBER: US/08/465,473B
? FILING DATE: 5 June 1995

```

? PRIOR APPLICATION DATA: US 07/828,832  
 ? APPLICATION NUMBER: 31-JAN-1992  
 ? FILING DATE: 05-FEB-1991  
 ? PRIOR APPLICATION DATA: GB 91-810079.3  
 ? APPLICATION NUMBER: 31-JAN-1992  
 ? FILING DATE: 05-FEB-1991

ATTORNEY/AGENT INFORMATION:  
NAME: Pfeiffer, Hesna J.

NAME: Pfeiffer, Hesna J.  
REGISTRATION NUMBER: 22,640

REFERENCE/DOCKET NUMBER: 4-18518/A/CIP/CONT2

TELECOMMUNICATION INFORMATION:

TELEPHONE: (908) 522 6940

TELEFAX: (908) 522 6955

SENTENCE CHARACTERISTICS:

SEQUENCE CHARACTERISTICS:  
LENGTH: 637 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

8-465-473B-16

US-08-465-473B-16

Alignment Scores:	
Pred. No.:	3.42
Score:	67.00
Percent Similarity:	37.14%
Best local Similarity:	22.86%
Query Match:	15.51%
DB:	2
length:	63
Matches:	24
Conservative:	15
Matches:	36
Indels:	30
Gaps:	5

US-09-049-696-10 (1-229) x US-08-465-473B-16 (1-637)

OY	1	GGCACAGCATCGTGGACAGACACCGTGGGAAAGAC-----	ACTTGGTTCTTAAAC	51
		.....		....
Db	47	GIYthrservalIyIsleuSerCysLyIsalSerAspIythrPhrthetIserIytrIrmMet		66
OY	52	ACCTGGACACGACGAG--CCTGCCCAAACTCTCTCG-----	GATGCCAG	96
Db	67	AsntrPValIySgInatrgPrIGIyGInGIyLeuGIutrrPIetIleMetIleasProser		86
OY	97	GGACGACGAG-----CAAGTGCGCTTGTAGTGGACAA		129
		:::	:::	
Db	87	AspserGIutInGIytrAsnGIuMetheIySaspIySalaIalaleuthrValAspIyS		106
		:::	:::	
OY	130	AAACACCAAAATGGCTACCTCCAATCCGACGACTGGCTAG-----		171
Db	107	SerSerAsntrAlatIyMetCInIleuSerSerIeuthrSerGIuAspSerAlaValIytr		126
OY	172	-----GTTGGCACTTGGAAATACACTCTGCACAGCAAGCTCAAA		210
Db	127	TyrcysAlatIySgIyGIyAlasercIySppIytrPhrAspValItrpGIyGInGIythr		146
OY	211	ACCTTGACCCCTGACT	225	
Db	147	ThrValIthrValSer	151	

RESULT 13  
US-08-506-296B-71

```

1  GENERAL INFORMATION:
2  APPLICANT: Phillips, Greg
3  APPLICANT: Cunningham, Bruce A.
4  APPLICANT: Crossin, Kathryn L.
5  TITLE OF INVENTION: NEURITE OUTGROWTH-PROMOTING POLYPEPTIDES
6  TITLE OF INVENTION: CONTAINING FIBRONECTIN TYPE III REPEATS AND METHODS OF USE
7  NUMBER OF SROUCENES: 77
8  CORRESPONDENCE ADDRESS:
9  ADDRESSEE: The Scripps Research Institute
10 STREET: 10550 No. 63132651th Torrey Pines Road, TPC-8

```

```

?      COMPUTER READABLE FORM:
?      MEDIUM TYPE: Floppy disk
?      COMPUTER: IBM PC compatible
?      OPERATING SYSTEM: PC-DOS/MS-DOS
?      SOFTWARE: Patent In Release #1.0, Version #1.25
?      CURRENT APPLICATION DATA:

```

CURRENT APPLICATION DATA:

ORGANISM: Murine sp

US-09-296-595-2

## Alignment Scores:

Pred. No.:	3.86	Length:	119
Score:	65.00	Matches:	23
Percent Similarity:	43.18%	Conservative:	15
Best Local Similarity:	26.14%	Mismatches:	26
Query Match:	15.05%	Indels:	24
DB:	3	Gaps:	5

US-09-049-696-10 (1-229) x US-09-296-595-2 (1-119)

```
QY 37 ACTTTGTTCTTATTCACCTGGACACGAG---CTCCCAATCCTTCTCTG----- 87
    |||  ::  |||  |||||  |||  |||  ::|||  ::|||  ::|||
Db 30 ThrAsnTyrTrpMetHisTrpValThrGlnArgProGlyGlnValLeuValTrpIleGly 49
QY 88 -----GATCCGAGT-----GACACAGAG-----CAAGGTGGC 114
    ::|||  ::|||  |||||  ::|||
Db 50 TyrThrAsnProAsnThrGlyTyrThrAspPheAsnGlnLysPheLysAspLysAlaThr 69
QY 115 TTGTAGTGGACAAACACCAAAATGGCTACCTCCAAATCCAGGCAAT----- 165
    |||||  ::|||  ::|||  ::|||  ::|||  ::|||  ::|||
Db 70 LeuThrAlaAspLysSerSerSerThrAlaTyrMetGlnLeuSerGlyLeuThrSerGlu 89
QY 166 -----GCTAAGTGGCACTTGGAAATACAGCTCGCAAGCAAGC 204
    |||  ::|||  ::|||  ::|||
Db 90 AspSerAlaValTyrTyrCysAlaArgGlyAspTyrTyrGlyTyrAspPheAlaTyrTrp 109
QY 205 TCACAAACCTTGACCTGACTGTC 228
    |||  |||||  ::|||  ::|||
Db 110 GlyGlnGlyThrThrValThrVal 117
```

Search completed: October 17, 2002, 17:59:32  
Job time : 9.43221 secs





: CURRENT APPLICATION NUMBER: US/09/193,562D  
 : CURRENT FILING DATE: 1998-11-17  
 : PRIOR APPLICATION NUMBER: US/60/065,922  
 : PRIOR FILING DATE: 1997-11-17  
 : NUMBER OF SEQ ID NOS: 47  
 : SEQ ID NO 1  
 : LENGTH: 3317  
 : TYPE: DNA  
 : ORGANISM: Unknown  
 : FEATURE:  
 : OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated  
 : OTHER INFORMATION: protein from bovine endothelial cells  
 : US-09-193-562D-1

Query Match	40.58%	Score 88.2	DB 4	Length 3317
Best Local Similarity	63.48%	Pred. No. 1.5e-21		
Matches 135	Conservative 0	Mismatches 78	Indels 0	Gaps 0

OY	5	AATGGCCCTCAATTAATGGTTTGGGGCCCTTTATCAGGAAATGGAGCTGTCTCAGGC	64
Pb	1464	ACTGCGCTTACTAATGTGTTCCAGTAAATTTTCATCTAGAAAGTGGAAAGCATCACTCAGAG	1523
	65	TCATCCAGCTTGAGAGTAAGGGATTAACTCCAGAACGCGCATGGATGATGGCACA	124
Db	1524	GCATTCAGTTGGAAAGCAAAAGCCTTGAAATTTACAGGAAGGAAAAAGATTAAGCGCACA	1583
OY	125	GTGATCGTGGACAGACACCGTGGGAAAGACACTTTTCTTATCACTCGACAACGAG	184
Db	1584	GTCGCTCTAAGACAGTACAGTTGGAAATGACACTTCTTTGTGTGCACATGAGCAATACAA	1643
OY	185	CTTCCCAATTCCTCTCTGGATCCCAATGGA	217
Db	1644	AAACCGAAATGTCTTCAGATCCAAAGGA	1676

RESULT 3  
 US-09-193-562D-29  
 Sequence 29, Application US/09193562D  
 Patent No. 6309857  
 GENERAL INFORMATION:  
 APPLICANT: Pauli, Benedict U.  
 TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 FILE REFERENCE: 18617.0052  
 CURRENT APPLICATION NUMBER: US/09/193,562D  
 CURRENT FILING DATE: 1998-11-17  
 PRIOR APPLICATION NUMBER: US/60/065,922  
 PRIOR FILING DATE: 1997-11-17  
 NUMBER OF SEQ ID NOS: 47  
 NO ID NO 29  
 LENGTH: 3418  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-09-193-562D-29

Query Match	40.5%	Score 88.2	DB 4	Length 3418
Best Local Similarity	63.4%	Pred. No. 1.5e-21		
Matches 135; Conservative	0	Mismatches 78	Indels 0	Gaps 0

[illegible]

Db 1654 AAGCCAGCAATATTTCTTCAAGATCCAAAAGGA 1686

```

RESULT 4
US-09-193-562D-33
; Sequence 33, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065.922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 33
; LENGTH: 3022
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-193-562D-33

```

Query Match	36.8%	Score 80.2;	DB 4;	Length 3022;
Best Local Similarity	61.0%	Pred. No. 9,7e-19;		
Matches 130;	Conservative	0;	Mismatches 83;	Indels 0;
				Gaps 0;

QY	5	AATGGCCCTAATATAGCTTTTGGGGCCCTTTATCATGAGAAATGGAGCTGTCTCTACAGGC	64
Db	1416	AACAGCCTTATCGATGCTTTTCATATACAAATTTTCATCTACAAAGTGGCAGGGTCTCCAGCAG	1475
QY	65	TCCATTCAGCTTGGAGTAAAGGATTTAACCTTCAGACAGCCAGCTGATGATAGTGCACA	124
Db	1476	GCTCTGACATGGAGAGCAAGCCCTTCGATGTGCAGCAGGGGCGATGATTAACCGTACA	1535
QY	125	GTGATCGTGACACACACCCTGGGAAAGACACTTTTCTTATATACCTGGACAAACGAG	184
Db	1536	GTACCTCTGGACACGTACCCGTGGCAACGACACGCTCTTTGTATACCTGGATGTGTAAA	1595
QY	185	CTTCCCAAAATCCCTTCCTGGATCCAGTGA	217
Db	1596	AAGCCAGAAATCATCTTTCAGATCCAAAAGGA	1628

```

RESULT 5
US-09-193-562D-31
: Sequence 31, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedict u.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 31
: LENGTH: 2970
: TYPE: DNA
: ORGANISM: Homo sapiens
US-09-193-562D-31

```

Query Match	33.4%;	Score 72.8;	DB 4;	Length 2970;
Best Local Similarity	64.0%;	Pred No. 4.1e-16;		
Matches 110; Conservative	0;	Mismatches 62;	Indels 0;	Gaps 0;

[illegible]

Db 1587 ACATATTCAGCTGTAAGTACAGCTGAAATGTCACACCTCACCATCATTTGAAAAACAC 1646  
OY 124 AGTATGTCGACGACGACCGGGAAGACACTTTGTTCTTCACCG 175  
Db 1647 AGTACTGTGATATATCTGTGGGACGACACTATGTCTTCTAAGTACGTGG 1698

## RESULT 6

US-08-342-930-1  
; Sequence 1, Application US/08342930  
; Patent No. 5821084  
; GENERAL INFORMATION:  
; APPLICANT: OLMSTED, ELIZABETH A.  
; APPLICANT: MAURO, LAURA J.  
; APPLICANT: DAVIS, ALAN R.  
; APPLICANT: DIXON, JACK E.  
; TITLE OF INVENTION: OSTEOBLAST-TESTICULAR PROTEIN TYROSINE  
; TITLE OF INVENTION: PHOSPHATASE  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: MORRISON & FOERSTER  
; STREET: 755 Page Mill Road  
; CITY: Palo Alto  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94304-1018  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/342,930  
; FILING DATE: 21-Nov-1994  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: KOSKI, ANTOINETTE F.  
; REGISTRATION NUMBER: 34,202  
; REFERENCE/DOCKET NUMBER: 20344-20975.00  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 813-5600  
; TELEFAX: (415) 494-0792  
; TELEX: 706141  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 5455 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 205..5337  
; US-08-342-930-1

Query Match 13.7%; Score 29.8; DB 1; Length 5455;  
Best Local Similarity 51.1%; Pred. No. 1.1;  
Matches 70; Conservative 0; Mismatches 67; Indels 0; Gaps 0;

OY 46 TGGAGCTGCTCTCAGCGCTCATCGCTTGAGAGTAAGGATTAACCTCCAGAACAG 105  
Db 5049 TGATGCTGTGGGCGCATGCTGCTCCGGGGGACAGACAGAACGACCGCTGCTCAG 5108  
OY 106 CCAATGATATTAATGGCAGTATGTCGACAGCAGCGTGGGAAGACACTTTGTTCT 165  
Db 5109 CCACCTCCAGCAAAACCAAAACAGCAGTGGGACACCTTCTTGCTATGGAACAGCTTACA 5168  
OY 166 TATCACTGGACAACG 182  
Db 5169 GCAAGCAGGAGCAGAGC 5185

## RESULT 7

US-08-449-287-11  
; Sequence 11, Application US/08449287  
; Patent No. 5877293  
; GENERAL INFORMATION:  
; APPLICANT: ADAIR, John Robert  
; APPLICANT: BODMER, Mark William  
; APPLICANT: MOUNTAIN, Andrew  
; APPLICANT: OWENS, Raymond John  
; TITLE OF INVENTION: CDR Grafted Anti-CEA Antibodies and  
; TITLE OF INVENTION: Their Production  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Foley & Lardner  
; STREET: 3000 K Street, N.W., Suite 500  
; CITY: Washington, D.C.  
; COUNTRY: USA  
; ZIP: 20007-5109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/449,287  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/154,389  
; FILING DATE:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT GB91/01108  
; FILING DATE: 05-JUL-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: GB 9014932.9  
; FILING DATE: 05-JUL-1990  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT GB90/02017  
; FILING DATE: 21-DEC-1990  
; ATTORNEY/AGENT INFORMATION:  
; NAME: SAKE, Bernhard D.  
; REGISTRATION NUMBER: 28,665  
; REFERENCE/DOCKET NUMBER: 40283/110 CARA  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (202)672-5300  
; TELEFAX: (202)672-5399  
; TELEX: 904136  
; INFORMATION FOR SEQ ID NO: 11:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 464 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; IMMEDIATE SOURCE:  
; CLONE: 9H2-A5B7 variable region  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 22..459  
; US-08-449-287-11

Query Match 13.5%; Score 29.4; DB 2; Length 464;  
Best Local Similarity 49.7%; Pred. No. 0.44;  
Matches 75; Conservative 0; Mismatches 76; Indels 0; Gaps 0;

OY 36 CATCAGGAATGAGCTGTCTCAGCGCTCATCCAGCTTGAGAGTAAGGATTAAACC 95  
Db 197 CACCTGGAAAGGACATCGATGCTGCTGCTTCATCCGAATAAGCAATGATACACA 256  
OY 96 TCCAGAACAGCAGTGGATGATGACAGTATCGTGGACAGCAGCGTGGGAAGACA 155  
Db 257 CAGAGTACTCTGATCTGTGAAGGAGAGATTCAATTTCCAGAGACAAAGACAGTCCA 316  
OY 156 CTTTGTCTTATCACCTGACCAACGAGCC 186



```
; FILE REFERENCE: A-596
; CURRENT APPLICATION NUMBER: US/09/411,329C
; CURRENT FILING DATE: 1999-10-01
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 19
; LENGTH: 816
; TYPE: DNA
; ORGANISM: Agkistrodon contortrix
; FEATURE:
; NAME/KEY: misc.feature
; OTHER INFORMATION: Fragment of fibrolase of Agkistrodon contortrix
US-09-411-329C-19
```

```
Query Match          13.1%; Score 28.6; DB 4; Length 816;
Best Local Similarity 55.6%; Pred. No. 1.4;
Matches 55; Conservative 0; Mismatches 44; Indels 0; Gaps 0;
```

```
98 CAGACAGCCAGTGATGTAATGGCAGACAGTGTGTCGACAGCACCCTGGGAAGGACACT 157
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
434 CAGAGCAACGACGAGGTATATAGCGAGTGCTCTGTGATACACCAAGTAAATGTTTCAG 375
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 158 TTGTTTCTTATCACTGTGACAGCAGCCTCCCAATC 196
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 374 TTGACACATGCCACCAAGTAAAGCCAGCAAGATATC 336
```

```
RESULT 12
US-09-411-329C-20/c
; Sequence 20, Application US/09411329C
; Patent No. 6261820
; GENERAL INFORMATION:
; APPLICANT: Boone, Thomas
; APPLICANT: Li, Huimin
; APPLICANT: Mann, Michael
; TITLE OF INVENTION: FIBRINOLYTICALLY ACTIVE POLYPEPTIDE
; FILE REFERENCE: A-596
; CURRENT APPLICATION NUMBER: US/09/411,329C
; CURRENT FILING DATE: 1999-10-01
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 1373
; TYPE: DNA
; ORGANISM: Agkistrodon contortrix
; FEATURE:
; NAME/KEY: misc.feature
; OTHER INFORMATION: Fragment of fibrolase of Agkistrodon contortrix
09-411-329C-20
```

```
Query Match          13.1%; Score 28.6; DB 4; Length 1373;
Best Local Similarity 55.6%; Pred. No. 1.4;
Matches 55; Conservative 0; Mismatches 44; Indels 0; Gaps 0;
```

```
QY 98 CAGACAGCCAGTGATGTAATGGCAGACAGTGTGTCGACAGCACCCTGGGAAGGACACT 157
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 991 CAGAGCAACGACGAGGTATATAGCGAGTGCTCTGTGATACCAAGTAAATGTTTCAG 932
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 158 TTGTTTCTTATCACTGTGACAGCAGCCTCCCAATC 196
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 931 TTGACACATGCCACCAAGTAAAGCCAGCAAGATATC 893
```

```
RESULT 13
US-09-411-329C-4/c
; Sequence 4, Application US/09411329C
; Patent No. 6261820
; GENERAL INFORMATION:
; APPLICANT: Boone, Thomas
; APPLICANT: Li, Huimin
; APPLICANT: Mann, Michael
; TITLE OF INVENTION: FIBRINOLYTICALLY ACTIVE POLYPEPTIDE
; FILE REFERENCE: A-596
```

```
; CURRENT APPLICATION NUMBER: US/09/411,329C
; CURRENT FILING DATE: 1999-10-01
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4
; LENGTH: 1386
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: Encodes pro-NAT (analog of fibrolase)
US-09-411-329C-4
```

```
Query Match          13.1%; Score 28.6; DB 4; Length 1386;
Best Local Similarity 55.6%; Pred. No. 1.4;
Matches 55; Conservative 0; Mismatches 44; Indels 0; Gaps 0;
```

```
QY 98 CAGACAGCCAGTGATGTAATGGCAGACAGTGTGTCGACAGCACCCTGGGAAGGACACT 157
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1194 CAGAGCAACGACGAGGTATATAGCGAGTGCTCTGTGATACACCAAGTAAATGTTTCAG 1135
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 158 TTGTTTCTTATCACTGTGACAGCAGCCTCCCAATC 196
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1134 TTGACACATGCCACCAAGTAAAGCCAGCAAGATATC 1096
```

```
RESULT 14
US-09-411-329C-7/c
; Sequence 7, Application US/09411329C
; Patent No. 6261820
; GENERAL INFORMATION:
; APPLICANT: Boone, Thomas
; APPLICANT: Li, Huimin
; APPLICANT: Mann, Michael
; TITLE OF INVENTION: FIBRINOLYTICALLY ACTIVE POLYPEPTIDE
; FILE REFERENCE: A-596
; CURRENT APPLICATION NUMBER: US/09/411,329C
; CURRENT FILING DATE: 1999-10-01
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7
; LENGTH: 1392
; TYPE: DNA
; ORGANISM: Agkistrodon contortrix
US-09-411-329C-7
```

```
Query Match          13.1%; Score 28.6; DB 4; Length 1392;
Best Local Similarity 55.6%; Pred. No. 1.4;
Matches 55; Conservative 0; Mismatches 44; Indels 0; Gaps 0;
```

```
QY 98 CAGACAGCCAGTGATGTAATGGCAGACAGTGTGTCGACAGCACCCTGGGAAGGACACT 157
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1200 CAGAGCAACGACGAGGTATATAGCGAGTGCTCTGTGATACCAAGTAAATGTTTCAG 1141
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 158 TTGTTTCTTATCACTGTGACAGCAGCCTCCCAATC 196
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1140 TTGACACATGCCACCAAGTAAAGCCAGCAAGATATC 1102
```

```
RESULT 15
US-09-411-329C-12/c
; Sequence 12, Application US/09411329C
; Patent No. 6261820
; GENERAL INFORMATION:
; APPLICANT: Boone, Thomas
; APPLICANT: Li, Huimin
; APPLICANT: Mann, Michael
; TITLE OF INVENTION: FIBRINOLYTICALLY ACTIVE POLYPEPTIDE
; FILE REFERENCE: A-596
; CURRENT APPLICATION NUMBER: US/09/411,329C
; CURRENT FILING DATE: 1999-10-01
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 12
```

LENGTH: 1620  
TYPE: DNA  
ORGANISM: Agkistrodon contortrix  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (1)..(1620)  
OTHER INFORMATION: Complementary (sense) strand of antisense strand (See SEQ ID NO:1)  
OTHER INFORMATION: 3  
NAME/KEY: misc\_feature  
OTHER INFORMATION: Coding sequence of native pro-fibrolase of Agkistrodon contortrix  
US-09-411-329C-12

Query Match 13.1%; Score 28.6; DB 4; Length 1620;  
Best Local Similarity 55.6%; Pred. No. 1.6;  
Matches 55; Conservative 0; Mismatches 44; Indels 0; Gaps 0;

QY 98 CAGAACAGCCAGTGTGATGGACAGTGTGATGCGTGACAGACGCCGTGGAAAGGACACT 157  
DB 1200 CAGAGCAACCAAGCAGGTAAATAGCGAGTGTCTGTGATACACCAAGTAAATGTTTCAG 1141  
OR 158 TTGTTCTTATCACCCTGGACACAGCGAGCCCTCCCAATC 196  
1140 TTGACACATGCCACCAAGCTAAGCCAGACACACAGTATC 1102

Search completed: October 17, 2002, 11:14:10  
Job time : 14.8551 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus.n2p model

Run on: October 17, 2002, 10:27:54 : Search time 6.12324 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-9  
Perfect score: 418  
Sequence: 1 GAACATGGCCATCATGATG.....TCTCTGGATGCCAGTGGAC 218

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 seqs, 24425594 residues  
Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:  
-MODEL=frame+ n2p.model -DBF=x1h  
-Q/cgn2\_1/USFTO.spool/US09049696/rnat\_16102002\_115821\_24739/app\_query.fasta\_1.13694  
-DB=Issued\_Patents\_AA -OFMT=fasta -SUFFIX=ra1 -MINMATCH=0.1 -LOOPL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blomsun62 -TRANS=human40.cdl  
-LIST=45 -DOCALLIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000  
-USRR=US09049696 @CGR 1.1 57 @unat 16102002\_115821\_24739 -NCPU=6 -ICPU=3  
-NO\_XLUXY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -MAIT -LONGLOG -DEV\_TIMEOUT=120  
-MAIN\_TIMEOUT=30 -THREDS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued Patents\_AA.\*  
1: /cgn2\_6/ptodata/2/iaa/5A.COMB.pep.\*  
2: /cgn2\_6/ptodata/2/iaa/5B.COMB.pep.\*  
3: /cgn2\_6/ptodata/2/iaa/5A.COMB.pep.\*  
4: /cgn2\_6/ptodata/2/iaa/5B.COMB.pep.\*  
5: /cgn2\_6/ptodata/2/iaa/PCTUS.COMB.pep.\*  
6: /cgn2\_6/ptodata/2/iaa/backfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	374	89.5	914	4 US-09-193-562D-28	Sequence 28, App1
2	222	53.1	903	4 US-09-193-562D-46	Sequence 46, App1
3	219	52.4	1000	4 US-09-193-562D-30	Sequence 30, App1
4	212	50.4	902	4 US-09-193-562D-34	Sequence 34, App1
5	202	48.3	795	4 US-09-193-562D-11	Sequence 11, App1
6	202	48.3	821	4 US-09-193-562D-12	Sequence 12, App1
7	202	48.3	905	4 US-09-193-562D-2	Sequence 2, App1
8	181.5	43.4	943	4 US-09-193-562D-32	Sequence 32, App1
9	64.5	15.4	400	2 US-08-713-298B-2	Sequence 2, App1
10	64.5	15.4	400	2 US-08-713-298B-2	Sequence 2, App1
11	64.5	15.4	400	3 US-08-814-052-4	Sequence 4, App1
12	64.5	15.4	400	3 US-08-814-052-4	Sequence 4, App1

13	64.5	15.4	400	4 US-09-226-529-2	Sequence 2, App1
14	64.5	15.4	462	2 US-08-870-180B-13	Sequence 13, App1
15	64.5	15.4	462	2 US-09-226-529-13	Sequence 13, App1
16	61.5	14.7	806	1 US-08-270-076A-11	Sequence 11, App1
17	61	15.0	389	1 US-08-991-862-2	Sequence 2, App1
18	60	14.7	114	4 US-09-199-637A-249	Sequence 249, App
19	60	14.7	589	1 US-07-668-648-2	Sequence 2, App1
20	60	14.7	589	1 US-08-429-998-2	Sequence 2, App1
21	60	14.7	589	1 US-08-431-333-2	Sequence 2, App1
22	60	14.7	589	5 PCT-US91-02321-2	Sequence 2, App1
23	59	14.5	143	4 US-09-227-357-192	Sequence 192, App
24	59	14.1	360	4 US-09-147-915-3	Sequence 3, App1
25	59	14.1	360	4 US-08-639-294-2	Sequence 2, App1
26	59	14.1	626	4 US-09-019-385-2	Sequence 2, App1
27	58	13.9	578	1 US-08-653-740-3	Sequence 3, App1
28	58	13.9	578	2 US-09-073-594-3	Sequence 3, App1
29	58	13.9	578	3 US-09-275-925-3	Sequence 3, App1
30	58	13.9	636	1 US-08-653-740-5	Sequence 5, App1
31	58	13.9	636	2 US-09-073-594-5	Sequence 5, App1
32	58	13.9	636	3 US-09-275-925-5	Sequence 5, App1
33	58	13.9	638	4 US-09-070-637-20	Sequence 20, App1
34	57.5	13.8	467	2 US-08-727-548-2	Sequence 2, App1
35	57.5	13.8	467	4 US-08-945-574-1	Sequence 1, App1
36	57.5	13.8	508	4 US-09-344-700-4	Sequence 4, App1
37	57.5	13.8	688	4 US-09-367-206-20	Sequence 20, App1
38	57.5	13.8	703	4 US-09-367-206-5	Sequence 5, App1
39	57	14.0	43	4 US-09-230-637-61	Sequence 61, App1
40	57	14.0	560	2 US-08-095-728B-6	Sequence 6, App1
41	57	14.0	560	5 PCT-US92-02320A-6	Sequence 6, App1
42	57	14.0	797	2 US-08-095-728B-2	Sequence 2, App1
43	57	14.0	797	5 PCT-US92-02320A-2	Sequence 2, App1
44	56.5	13.9	168	2 US-08-612-788-28	Sequence 28, App1
45	56.5	13.9	168	3 US-09-066-028-28	Sequence 28, App1

## ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
Sequence 28, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193,562D  
CURRENT FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 28  
LENGTH: 914  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-193-562D-28

Alignment Scores:  
Pred. No.: 2.07e-40  
Score: 374.00  
Percent Similarity: 100.00%  
Best local Similarity: 100.00%  
Query Match: 89.47%  
DB: 4  
Gaps: 0

US-09-049-696-9 (1-218) x US-09-193-562D-28 (1-914)

QY 2 AACATGGCCATGATGCTTTGGGGCCCTTCACAGAAATGAGCTGCTCAG 61  
DB 465 AsnAsnGlyLeuIleAspAlaPheGlyAlaLeuSerGlyAsnGlyAlaValSerGln 484  
QY 62 CGCTCCATCCAGCTTGAGAGTAAGGATTAACCTCCAGAACACCGAGTGATGATGCG 121

Db 485 Argserileglnleuglnuserlysglyleuthrleuglnasnsersglntrpmetasnclly 504  
QY 122 ACAATGATCGTGACAGACCGGTGGAAAGACACTTTGTTTATCAGCTGACGACAAG 181  
Db 505 ThrValIleValAspSerThrValGlyLysAspThrleupheuleiThrTrpThr 524  
QY 182 CAGCTCCCAATCCTTCTGTGGATCCCAAGTGA 217  
Db 525 GlnProGlnIleleuThrAspProsergly 536  
RESULT 2  
US-09-193-562D-46  
; Sequence 46, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 46  
; LENGTH: 903  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal  
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-  
US-09-193-562D-46  
Alignment Scores:  
Pred. No.: 1.26e-20 Length: 903  
Score: 222.00 Matches: 39  
Percent Similarity: 77.46% Conservative: 16  
Best Local Similarity: 54.93% Mismatches: 16  
Query Match: 53.11% Indels: 0  
Gaps: 0  
DB: 4  
US-09-049-696-9 (1-218) x US-09-193-562D-46 (1-903)  
QY 5 AATGGCCTCATGTGATGCTTTGGGGCCCTTTCATCAGAAATGAGACTGTCTCAGCGC 64  
Db 467 AsnGlyLeuThrAsnAlaPheSerArgIleSerSerArgserglySerIlethrGln 486  
QY 65 TCATCCAGCTTGAGAGTAAGGATTAACTCCAGAAACAGCCAGTGATGATGGACA 124  
Db 487 ThrIleGlnIleuGlnuserlysalaleuAlaIleThrGlnLysLysTrpValasnGlyThr 506  
QY 125 GTGATCGTGACAGACCGGTGGAAAGACACTTTGTTTATCAGCTGACGACAAG 184  
Db 507 ValProValAspSerThrIleGlyLysAspThrPhePheValThrTrpThrIleLys 526  
QY 185 CCTCCCAATCCTTCTGTGGATCCCAAGTGA 217  
Db 527 LysProGlnIleleuThrleuGlnAspProLysgly 537  
RESULT 3  
US-09-193-562D-30  
; Sequence 30, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17

; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 30  
; LENGTH: 1000  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-30  
Alignment Scores:  
Pred. No.: 3.18e-20 Length: 1000  
Score: 219.00 Matches: 41  
Percent Similarity: 76.06% Conservative: 13  
Best Local Similarity: 57.75% Mismatches: 17  
Query Match: 52.39% Indels: 0  
Gaps: 0  
DB: 4  
US-09-049-696-9 (1-218) x US-09-193-562D-30 (1-1000)  
QY 5 AATGGCCTCATGTGATGCTTTGGGGCCCTTTCATCAGAAATGAGACTGTCTCAGCGC 64  
Db 486 AsnGlyLeuIleAspAlaPheSerArgIleSerSerArgserglySerIlethrGln 505  
QY 65 TCATCCAGCTTGAGAGTAAGGATTAACTCCAGAAACAGCCAGTGATGATGGACA 124  
Db 506 AlaLeuGlnIleuGlnuserlystrleuAsnIleProAlaLysLysTrpIleAsnGlyThr 525  
QY 125 GTGATCGTGACAGACCGGTGGAAAGACACTTTGTTTATCAGCTGACGACAAG 184  
Db 526 ValProValAspSerThrValArgAsnAspThrSerPheValThrTrpThrIleGln 545  
QY 185 CCTCCCAATCCTTCTGTGGATCCCAAGTGA 217  
Db 546 LysProAlaIleIleleuGlnAspProLysgly 556  
RESULT 4  
US-09-193-562D-34  
; Sequence 34, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 34  
; LENGTH: 902  
; TYPE: PRT  
; ORGANISM: Mus musculus  
US-09-193-562D-34  
Alignment Scores:  
Pred. No.: 2.52e-19 Length: 902  
Score: 212.00 Matches: 39  
Percent Similarity: 74.65% Conservative: 14  
Best Local Similarity: 54.93% Mismatches: 18  
Query Match: 50.72% Indels: 0  
Gaps: 0  
DB: 4  
US-09-049-696-9 (1-218) x US-09-193-562D-34 (1-902)  
QY 5 AATGGCCTCATGTGATGCTTTGGGGCCCTTTCATCAGAAATGAGACTGTCTCAGCGC 64  
Db 467 AsnserleuIleAspAlaPheSerArgIleSerSerArgserglySerValserGln 486  
QY 65 TCATCCAGCTTGAGAGTAAGGATTAACTCCAGAAACAGCCAGTGATGATGGACA 124  
Db 487 AlaLeuGlnIleuGlnuserlysalalPheAspValAlaGlnLysLysTrpIleAsnGlyThr 506  
QY 125 GTGATCGTGACAGACCGGTGGAAAGACACTTTGTTTATCAGCTGACGACAAG 184



Db 507 ValProLeuAspSerThrValIglyAsnAspThrPhePheValIleThrTrpMetVallys 526  
QY 185 CCGCCCAATCCTTCTGCGATCCAGTGGA 217  
Db 527 LysProIleValIleLeuGlnAspProLysGly 537  
RESULT 5  
US-09-193-562D-11  
; Sequence 11, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calicium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 11  
; LENGTH: 795  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells  
US-09-193-562D-11  
Alignment Scores:  
Pred. No.: 4,86e-18 Length: 795  
Score: 202.00 Matches: 38  
Percent Similarity: 75.71% Conservative: 15  
Best Local Similarity: 54.29% Mismatches: 17  
Query Match: 48.33% Indels: 0  
Gaps: 0  
DB: 4  
US-09-049-696-9 (1-218) x US-09-193-562D-11 (1-795)  
QY 8 GGCTCATFTGATGCTTTGGGGCCCTTCATCAGGAATGAGCTGCTCTCAGCGCTCC 67  
Db 469 GlycerhrsnAlaPheSerArgIleSerSerArgSerGlySerIleThrGlnGlnAla 488  
QY 68 ATCCAGCTTGAGAGTAGGATTAACCTCCAGAACAGCCAGTGATGATGACAGTG 127  
Db 489 IlleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgLysArgValAsnGlyThrVal 508  
128 ATCGTGACAGACACCGTGGGAAAGACACTTGTCTTATCACCCTGACACGACCT 187  
509 ProValAspSerThrValIglyAsnAspThrPhePheValValThrTrpThrIleGlnLys 528  
QY 188 CCGCAATCCTTCTCTGCGATCCAGTGGA 217  
Db 529 ProIleValIleLeuGlnAspProLysGly 537  
RESULT 6  
US-09-193-562D-12  
; Sequence 12, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calicium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 12  
; LENGTH: 821  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:

; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells  
US-09-193-562D-12  
Alignment Scores:  
Pred. No.: 4.91e-18 Length: 821  
Score: 202.00 Matches: 38  
Percent Similarity: 75.71% Conservative: 15  
Best Local Similarity: 54.29% Mismatches: 17  
Query Match: 48.33% Indels: 0  
Gaps: 0  
DB: 4  
US-09-049-696-9 (1-218) x US-09-193-562D-12 (1-821)  
QY 8 GGCTCATFTGATGCTTTGGGGCCCTTCATCAGGAATGAGCTGCTCTCAGCGCTCC 67  
Db 469 GlycerhrsnAlaPheSerArgIleSerSerArgSerGlySerIleThrGlnGlnAla 488  
QY 68 ATCCAGCTTGAGAGTAGGATTAACCTCCAGAACAGCCAGTGATGATGACAGTG 127  
Db 489 IlleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgLysArgValAsnGlyThrVal 508  
QY 128 ATCGTGACAGACACCGTGGGAAAGACACTTGTCTTATCACCCTGACACGACCT 187  
Db 509 ProValAspSerThrValIglyAsnAspThrPhePheValValThrTrpThrIleGlnLys 528  
QY 188 CCGCAATCCTTCTCTGCGATCCAGTGGA 217  
Db 529 ProIleValIleLeuGlnAspProLysGly 537  
RESULT 7  
US-09-193-562D-2  
; Sequence 2, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calicium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 2  
; LENGTH: 905  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells  
US-09-193-562D-2  
Alignment Scores:  
Pred. No.: 5.04e-18 Length: 905  
Score: 202.00 Matches: 38  
Percent Similarity: 75.71% Conservative: 15  
Best Local Similarity: 54.29% Mismatches: 17  
Query Match: 48.33% Indels: 0  
Gaps: 0  
DB: 4  
US-09-049-696-9 (1-218) x US-09-193-562D-2 (1-905)  
QY 8 GGCTCATFTGATGCTTTGGGGCCCTTCATCAGGAATGAGCTGCTCTCAGCGCTCC 67  
Db 469 GlycerhrsnAlaPheSerArgIleSerSerArgSerGlySerIleThrGlnGlnAla 488  
QY 68 ATCCAGCTTGAGAGTAGGATTAACCTCCAGAACAGCCAGTGATGATGACAGTG 127  
Db 489 IlleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgLysArgValAsnGlyThrVal 508  
QY 128 ATCGTGACAGACACCGTGGGAAAGACACTTGTCTTATCACCCTGACACGACCT 187  
Db 509 ProValAspSerThrValIglyAsnAspThrPhePheValValThrTrpThrIleGlnLys 528



```

TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-867-0123
TELEFAX: 212-878-9655
TELEX:
: INFORMATION FOR SEQ ID NO: 4:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 400 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-08-814-052-4

Alignment Scores:
Pred. No.: 3.17 Length: 400
Score: 64.50 Matches: 15
Percent Similarity: 55.32% Conservative: 11
Best Local Similarity: 31.91% Mismatches: 20
Query Match: 15.43% Indels: 1
DB: 3 Gaps: 1

US-09-049-696-9 (1-218) x US-08-814-052-4 (1-400)
QY 2 AACAAAGCCCTCATATGCTTTGGGGCCCTTTCATCGAATAGA---CGTGTCTCT 58
Db 28 AAspAspserValValGluGluHisGlyGlnLeuSerTleSerAsnGlyGlnLeuValasn 47
QY 59 CAGGCGCTCCATCCAGCTGAGTGAAGATTAAACCTCCAGAAACAGCAGCATGATGAAT 118
Db 48 GlnArgGlyGlnGluValGlnLeuGlySerGlyMetSerSerHisGlyLeuGlnTrrPyrGly 67
QY 119 GGCACAGTATGCTGTGACACG 139
Db 68 GlnPheValasnTyrGlnSer 74

RESULT 12
US-08-812-829-4
: Sequence 4, Application US/08812829
: Patent No. 6017751
: GENERAL INFORMATION:
: APPLICANT: von der Osten, Claus
: APPLICANT: Bjornvad, Mads E.
: APPLICANT: Vind, Jesper
: APPLICANT: Rasmussen, Michael Dolberg
: TITLE OF INVENTION: PROCESS FOR REMOVAL OR BLEACHING OF SOILING
: TITLE OF INVENTION: OR STAINS FROM CELLULOSIC FABRIC
: NUMBER OF SEQUENCES: 31
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: No. 60177510 No. 6017751disk of No. 6017751th America, Inc.
: STREET: 405 Lexington Avenue, Suite 6400
: CITY: New York
: STATE: New York
: COUNTRY: U.S.A.
: ZIP: 10174-6401
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Diskette
: COMPUTER: IBM Compatible
: OPERATING SYSTEM: DOS
: SOFTWARE: FastSeq for Windows Version 2.0
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/812,829
: FILING DATE: 06-MAR-1997
: CLASSIFICATION: 435
: ATTORNEY/AGENT INFORMATION:
: NAME: Lambitis, Elias J
: REGISTRATION NUMBER: 33,728
: REFERENCE/DOCKET NUMBER: 4690.204-US
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 212-867-0123
: TELEFAX: 212-878-9655
: TELEX:
: INFORMATION FOR SEQ ID NO: 4:
: SEQUENCE CHARACTERISTICS:

```



Alignment Scores:

Pred. No.:	3.3	Length:	462
Score:	64.50	Matches:	15
Percent Similarity:	55.32%	Conservative:	11
Best Local Similarity:	31.91%	Mismatches:	20
Query Match:	15.43%	Indels:	1
DB:	2	Gaps:	1

US-09-049-696-9 (1-218) x US-08-870-180B-13 (1-462)

QY 2 AACATGGCCCTCATGTGATGCTTTGGGGCCCTTCATAGGAATGCA---GCTGTCTCT 58  
Db 28 AsnspServalValIGluGlnHisGlyGlnLeuSerIleSerAsnGlyGlnLeuValAsn 47  
QY 59 CAGCGCTCCATCCAGCTTGAGAGTAAGGATTAACCCCTCAGAACAGCCAGTGGATGAT 118  
Db 48 GluArgGlyGluGlnValGlnLeuLysGlyMetSerHisGlyLeuGlnTrpTyrGly 67

119 GGCACAGTGTGACGAC 139  
68 GlnPheValAsnTyrGluSer 74

RESULT 15

US-09-226-529-13  
Sequence 13, Application US/09226529  
Patent No. 6280984

GENERAL INFORMATION:

APPLICANT: Outtrup, Helle  
APPLICANT: Danbmann, Claus  
APPLICANT: Olsen, Arne  
APPLICANT: Bisg rd-Frantzen, Henrik  
APPLICANT: Sch lein, Martin  
APPLICANT: J rgensen, Per  
TITLE OF INVENTION: DNA Constructs and Methods of Producing  
TITLE OF INVENTION: - Cellulytic Enzymes  
NUMBER OF SEQUENCES: 14  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: No. 6280984disk of No. 6280984th America, Inc.  
STREET: 405 Lexington Avenue, Suite 6400  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10174-6401

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/226,529

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/08/870,180

FILING DATE: 6-June-1997

ATTORNEY/AGENT INFORMATION:

NAME: Rozek, Carol E.

REGISTRATION NUMBER: 36,993

REFERENCE/DOCKET NUMBER: 3794,434-US

TELECOMMUNICATION INFORMATION:

TELEPHONE: 212 867 0123

TELEFAX: 212 867 0298

INFORMATION FOR SEQ ID NO: 13:

SEQUENCE CHARACTERISTICS:

LENGTH: 462 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-09-226-529-13

Alignment Scores:

Pred. No.:

Length:

462

Score: 64.50 Matches: 15  
Percent Similarity: 55.32% Conservative: 11  
Best Local Similarity: 31.91% Mismatches: 20  
Query Match: 15.43% Indels: 1  
DB: 4 Gaps: 1

US-09-049-696-9 (1-218) x US-09-226-529-13 (1-462)

QY 2 AACATGGCCCTCATGTGATGCTTTGGGGCCCTTCATAGGAATGCA---GCTGTCTCT 58  
Db 28 AsnspServalValIGluGlnHisGlyGlnLeuSerIleSerAsnGlyGlnLeuValAsn 47  
QY 59 CAGCGCTCCATCCAGCTTGAGAGTAAGGATTAACCCCTCAGAACAGCCAGTGGATGAT 118  
Db 48 GluArgGlyGluGlnValGlnLeuLysGlyMetSerHisGlyLeuGlnTrpTyrGly 67  
QY 119 GGCACAGTGTGACGAC 139  
Db 68 GlnPheValAsnTyrGluSer 74

Search completed: October 17, 2002, 17:59:29  
Job time : 8.12324 secs

***This Page Blank (uspto)***

FILE REFERENCE: 18617-0

; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 ; PCT NUMBER: 10617 0053

CURRENT APPLICATION NUMBER: US/09/193,562D  
 CURRENT FILING DATE: 1998-11-17  
 PRIOR APPLICATION NUMBER: US/60/065,922  
 PRIOR FILING DATE: 1997-11-17  
 NUMBER OF SEQ ID NOS: 47  
 SEQ ID NO 33  
 LENGTH: 3022  
 TYPE: DNA  
 ORGANISM: Mus musculus  
 US-09-193-562D-33

Query Match	48.2%	Score 113.2;	DB 4;	Length 3022;
Best Local Similarity	68.3%;	Pred. No. 2.3e-30;		
Matches 157;	Conservative	0;	Mismatches 73;	Indels 0;

OY	3	CACAGCAAAATTCGCCAGCCCTCGGTAGATTGTTCGAATATATCCGACAGAGGCTCCCC	62
Db	1832	CACAGCCCATGACCTTACCGCGGATGATGTGTTCGACAGCGGTCACGCAAGATTTTTCGC	1891
OY	63	AATTCCTAGGGCCAGTGTCAAGCCCTGATGTGAATCAGTAATGCAAAAACAGTTACTT	122
Db	1892	TGTTCTGGGACCAATGTCAAGCCCTCATAGAAGCTGAACATGCAATCAAGTACCTT	1951
OY	123	GGAACTACTGATATGAGCAGGCTGTAATGCTACTAAGATGAGAGGCTGTACTCAAG	182
Db	1952	GGAGCTCTGGGACATGAGGGGAGGTGTGATTCGTTAAATAATGATGGCATTTACACAAG	2011
OY	183	GTATTTCACTATGACACAGCATGGTAAATACAGTCTAAAAGTCGGG	232
Db	2012	ATACTTTACAGATTTATCTGAAATGGTAGATACAGCTTAAAGTCTCGTG	2061

RESULT 3  
US-09-193-562D-31  
; Sequence 31, Application US/09193562D

Patent No.: 0509292  
 GENERAL INFORMATION:  
 APPLICANT: Pauli, Benedict U.  
 TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 FILE REFERENCE: 18617-.0052  
 CURRENT APPLICATION NUMBER: US/09/193,562D  
 CURRENT FILING DATE: 1998-11-17  
 PRIOR APPLICATION NUMBER: US/60/065,922  
 PRIOR FILING DATE: 1997-11-17  
 NUMBER OF SEQ ID NOS: 47  
 SEQ ID NO 31  
 LENGTH: 2970  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 09-193-562D-31  
 Query Match 45.7% Score 107.4; DB 4; Length 2970;  
 Best Local Similarity 66.8%; Pred. No. 2,5e-28;  
 Matches 153; Conservative 0; Mismatches 76; Indels 0; Gaps 0

Qy	1	GACACCAGCAAAATTCGCCAGCCCTCTGTAATTATATCAAAATTTGCGCAAGAGCTCC	60
Db	1948	GACAGGCTCCAAATTTTCCATCTCTGTATGATTTATCCATATGTGAACAGGATTTTAT	2007
Qy	61	CCAAATTCACAGGCGCAGTGTACACAGCCCTGATTAATCAGTGAATGATAAAACAGTTACC	120
Db	2008	CCCAATTCATTAATGCCACGTCTACCTGCCACAATTTAGCGCAGAGCATGGAGATCCTGTACG	2067
Qy	121	TTGGAACTACTGATATATGAGAGCAGGTGCTATGCTACTAAGATATGACGTTGTCCTACTA	180
Db	2068	CTGGAAGCTCCTGATGATATGAGACAGGTCTGATGTATTAATAAAATGATGGAATTTACTCG	2127
Qy	181	AGGATATTTCACAACTATATACACAGAAATGTGATACAGTGAATAAGATGC	229
Db	2128	AGGATATTTTCTCTCTTCTCTGCAATATGATATTAAGCTTGAAGAATGC	2176

```

RESULT 4
US-09-193-562D-29
Sequence 29, Application US/09193562D
Patent No. 6309857
GENERAL INFORMATION:
APPLICANT: Pauli, Benedicht U.
TITLE OF INVENTION: Nucleotide Sequences E
TITLE OF INVENTION: Activated Chloride Ch
FILE REFERENCE: 18611.0052
CURRENT APPLICATION NUMBER: US/09/193,562D
CURRENT FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US/60/065,922
PRIOR FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 29
LENGTH: 3418
TYPE: DNA
ORGANISM: Homo sapiens
US-09-193-562D-29

```

Query Match	45.5%	Score 107;	DB 4;	Length 3418;
Best Local Similarity	68.0%	Pred. No. 3,8	28;	
Matches 149;	Conservative	0;	Mismatches 70;	Indels 0;
				Gaps 0;

QY 11 AATTCGCCAGCCCTCTGCTGTTTATGCAAAATTTGCCAAGAGACCTCCCAATTCTCA 70  
DB 1904 ATTACCCAGCCCGCATGTTGTTATGCAATGTCTCAGTCACAGGTTTCTCCTGTTGCG 1963  
QY 71 GGGCCAGTGTACACAGCCCTGATTTGAATCACTGTAATGAAAAACAGTTACTTTCGACATAC 130  
DB 1964 GAATCAATGTAACAGCCATTATAGAAAAATGAAGAGGACATCAAGTAACATTCAGAGCTCT 2023  
QY 131 TGGATATGAGACGAGGTGCTGATGCTACTAAGATGACGCTGTCTACTCAACGATATTTCA 190  
DB 2024 GCGAACAAGGCGGACAGGTGCTGATTTCTGTCAAGATGATGCGATCTACTCAAGGTATTTTA 2083  
QY 191 CAACCTATGACACGATGCTGATACAGTGTAAAGTGC 229  
DB 2084 CAGATTACCATGGAATGTAATGATACAGTTTAAAGTGC 2122

```

RESULT 5
US-09-193-562D-1
; Sequence 1, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 1
; LENGTH: 3317
; TYPE: DNA
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated
; OTHER INFORMATION: protein from bovine endothelial cells
US-09-193-562D-1

```

Query Match	Similarity	44.0%	Score 103.41	DB 4	Length 3317
Best Local	Similarity	66.28%	Pred No. 7.1e-27		
Matches 14%	Conservative	0	Mismatches 76	Indels 0	Gaps 0
QY	11	AATTCGCCAGCCCTCTGCTAGTTATTCACAATATTCGCCAGAGCGTCCCAATTCCTCA	70		
Db	1894	ATTATTCAGGCCACATGATGTTTATTCACACAGTCATCAAGGCTTTTTCCTGCTACTGG	1953		
QY	71	GGGCGAGTGTACACGCCCTGATTTCATATCAGTGAATGSAAMAAACAGTTACTCTGGAACTAC	130		

**OY**    11 AATTCCCAAGCCTCTGTGATTTATGCAAATATTCGCCAAGAAGCCTCCCAATTCTCA 70  
         | | | | | | | | | | | | | | | | | | | |  
**Dd**    1894 ATTATCCTTACCCCATGATTTGTTATGCAAGCATCTCAAAGGTTTTCCTGTACTTG 1953  
         | | | | | | | | | | | | | | | | | | | |  
**OY**    71 GGGCAGTGTCAACAGCCCTGATTGAATCAGTAATGAAAAACAGTTACCTTGGAACTAC 130





LOCATION: 2..685  
US-08-469-667-8

Query Match 27.7%; Score 65; DB 1; Length 878;  
Best Local Similarity 100.0%; Pred. No. 1.5e-13;  
Matches 65; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 171 TGCTACTCAAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGC 230  
|||||  
DB 1 TGCTACTCAAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGC 60  
OY 231 GGCTC 235  
|||||  
DB 61 GGCTC 65

RESULT 9  
US-09-224-110-8

; Sequence 8; Application US/09224110  
; Patent No. 6337195

; GENERAL INFORMATION:

; APPLICANT: Yu, Guo-Liang

; ATTORNEY/AGENT INFORMATION:

; TITLE OF INVENTION: Colon Specific Genes and Proteins

; NUMBER OF SEQUENCES: 24

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,

; ADDRESSEE: Stewart & Olstein

; STREET: 6 Becker Farm Road

; CITY: Roseland

; STATE: NJ

; COUNTRY: USA

; ZIP: 07068-1739

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/224,110

; FILING DATE:

; CLASSIFICATION:

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: 08/469,667

; FILING DATE: 06-JUN-1995

; ATTORNEY/AGENT INFORMATION:

; NAME: Ferraro, Gregory D.

; REGISTRATION NUMBER: 36,134

; REFERENCE/DOCKET NUMBER: 325800-435

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 201-994-1700

; TELEFAX: 201-994-1744

; INFORMATION FOR SEQ ID NO: 8:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 878 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 2..685

; US-09-224-110-8

Query Match 27.7%; Score 65; DB 4; Length 878;  
Best Local Similarity 100.0%; Pred. No. 1.5e-13;  
Matches 65; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 171 TGCTACTCAAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGC 230  
|||||

DB 1 TGCTACTCAAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGC 60

OY 231 GGCTC 235

DB 61 GGCTC 65

RESULT 10  
PCT-US95-07289-8

; Sequence 9; Application PC/TUS9507289

; GENERAL INFORMATION:

; APPLICANT: Yu, Guo-Liang

; ATTORNEY/AGENT INFORMATION:

; TITLE OF INVENTION: Colon Specific Genes and Proteins

; NUMBER OF SEQUENCES: 24

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,

; ADDRESSEE: Stewart & Olstein

; STREET: 6 Becker Farm Road

; CITY: Roseland

; STATE: NJ

; COUNTRY: USA

; ZIP: 07068-1739

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: PCT/US95/07289

; FILING DATE: 06-JUN-1995

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: Ferraro, Gregory D.

; REGISTRATION NUMBER: 36,134

; REFERENCE/DOCKET NUMBER: 325800-265

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 201-994-1700

; TELEFAX: 201-994-1744

; INFORMATION FOR SEQ ID NO: 8:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 878 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 2..685

; PCT-US95-07289-8

Query Match 27.7%; Score 65; DB 5; Length 878;  
Best Local Similarity 100.0%; Pred. No. 1.5e-13;  
Matches 65; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 171 TGCTACTCAAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGC 230  
|||||

DB 1 TGCTACTCAAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGC 60

OY 231 GGCTC 235  
|||||

DB 61 GGCTC 65

RESULT 11

US-08-809-267-9

; Sequence 9; Application US/08809267

; Patent No. 5861296

; GENERAL INFORMATION:

; APPLICANT: LENNOX, Tricia L.

; ATTORNEY/AGENT INFORMATION:

; APPLICANT: SEARS, Lauren E.

; TITLE OF INVENTION: PURIFIED THERMOSTABLE INORGANIC

; TITLE OF INVENTION: PYROPHOSPHATASE OBTAINABLE FROM THERMOCOCCUS

; NUMBER OF SEQUENCES: 28

RESULT 12  
PCT-US95-13662A-9  
Sequence 9, Application PC/TUS9513662A  
GENERAL INFORMATION:  
APPLICANT: LENNOX, Tricia L.  
APPLICANT: SLATKO, Barton E.  
APPLICANT: SEARS, Lauren E.  
TITLE OF INVENTION: PURIFIED THERMOSTABLE INORGANIC  
TITLE OF INVENTION: PYROPHOSPHATASE OBTAINABLE FROM THERMOCOCCUS  
TITLE OF INVENTION: LITORALIS  
NUMBER OF SEQUENCES: 28  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: NEW ENGLAND BIOLABS, INC.  
STREET: 32 TOZER ROAD  
CITY: BEVERLY  
STATE: MASSACHUSETTS  
COUNTRY: USA  
ZIP: 01915  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25

	Query Match	Best Local Similarity	Score 31.4%	DB 5	Length 531
	Matches 59;	Conservative 0;	Mismatches 46;	Indels 0;	Gaps 0;
QY	8	GCAATTC	CCCCCCTCTGCTAGT	TTTATGCAAA	TTTCGCCAAGAGCCTCCCAATTC 67
Db	262	GCAAGACCAAT	TGGCTCTTTCAAGT	TGATAGACACGCGGAC	GAAGACTACAAAGSTATTG 321
QY	68	TCAGGCGCAGT	GTCCACAGCCTGAT	TGATCGAATCGAAAAA 112	
Db	322	GCAAGTTCAGT	GGAAGATCCCTACT	CTTATGACTGGAAGACATA 366	

RESULT 13  
 US-09-173-151A-17  
 Sequence 17, Application US/09173151A  
 Patent No. 6326472  
 GENERAL INFORMATION:  
 APPLICANT: Timans, Jacqueline C.  
 APPLICANT: Debets, Johannes Eduard Maria  
 APPLICANT: Antonius  
 APPLICANT: Sana, Theodore R.  
 APPLICANT: Bazan, J. Fernando  
 APPLICANT: Kasteleijn, Robert A.  
 TITLE OF INVENTION: Human Receptor Proteins; Related Reagents and Methods  
 NUMBER OF SEQUENCES: 36  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: DNAX Research Institute  
 STREET: 901 California Avenue  
 CITY: Palo Alto  
 STATE: California  
 COUNTRY: USA  
 ZIP: 94304-1104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patentln Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/173.151A  
 FILING DATE: 14-OCT-1998  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 60/065.776  
 FILING DATE: 17-NOV-1997  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 60/078.008  
 FILING DATE: 12-MAR-1998  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 60/081.883

FILING DATE: 15-APR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/095,987  
FILING DATE: 10-AUG-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/078,416  
FILING DATE: 18-MAR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/062,066  
FILING DATE: 15-OCT-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Ching, Edwin P.  
REGISTRATION NUMBER: 34,090  
REFERENCE/DOCKET NUMBER: DX0767X  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (650)852-9196  
TELEFAX: (650)496-1200  
INFORMATION FOR SEQ. ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 516 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..514  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: 374  
OTHER INFORMATION: /note= "nucleotides 374, 383, 396,  
403, 433, 458, 459, 483, and 515 are indicated as C; each may  
OTHER INFORMATION: A, C, G, or T"  
US-09-173-151A-17  
Query Match 12.8%; Score 30; DB 4; Length 516;  
Best Local Similarity 50.7%; Pred. No. 0.3;  
Matches 72; Conservative 0; Mismatches 70; Indels 0; Gaps 0;  
QY 19 AGCCCTCTGTGTAATTGCAAAATATTCGCCAAGAGACCTCCCAATTCTCAGGGCCAGT 78  
DB 125 ACCCAGCTGGGTGACTCTGCTAATCTAACCCTGACGACCTTTCTTGGGTACAGCGGAGAT 184  
QY 79 GTCACAGCCCTGATGTGAATGATGAAAGAAACAGTTACCTTGACTACTGATTAAT 138  
DB 185 GTGAGTCTTTAATTCTGATGAAAGAGAAAAATTTATGAAATCTGGATGAAAAAT 244  
QY 139 GGAGCAGGTGCTGATGCTACTA 160  
245 CGAGTTGGGAAAGTGACATT 266  
RESULT 14  
US-09-173-151A-19  
Sequence 19, Application US/09173151A  
Patent No. 6326472  
GENERAL INFORMATION:  
APPLICANT: Timans, Jacqueline C.  
APPLICANT: Debets, Johannes Eduard Maria  
APPLICANT: Antonius  
APPLICANT: Sana, Theodore R.  
APPLICANT: Bazan, J. Fernando  
APPLICANT: Kastelein, Robert A.  
TITLE OF INVENTION: Human Receptor Proteins; Related Reagents and Methods  
NUMBER OF SEQUENCES: 36  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: DNA Research Institute  
STREET: 901 California Avenue  
CITY: Palo Alto  
STATE: California  
COUNTRY: USA  
ZIP: 94304-1104  
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09173,151A  
FILING DATE: 14-OCT-1998  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/065,776  
FILING DATE: 17-NOV-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/078,008  
FILING DATE: 12-MAR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/081,883  
FILING DATE: 15-APR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/095,987  
FILING DATE: 10-AUG-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/078,416  
FILING DATE: 18-MAR-1998  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/062,066  
FILING DATE: 15-OCT-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Ching, Edwin P.  
REGISTRATION NUMBER: 34,090  
REFERENCE/DOCKET NUMBER: DX0767X  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (650)852-9196  
TELEFAX: (650)496-1200  
INFORMATION FOR SEQ. ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 191 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..1458  
US-09-173-151A-19  
Query Match 12.8%; Score 30; DB 4; Length 191;  
Best Local Similarity 50.7%; Pred. No. 0.58;  
Matches 72; Conservative 0; Mismatches 70; Indels 0; Gaps 0;  
QY 19 AGCCCTCTGTGTAATTGCAAAATATTCGCCAAGAGACCTCCCAATTCTCAGGGCCAGT 78  
DB 139 ACCCAGCTGGGTGACTCTGCTAATCTAACCCTGACGACCTTTCTTGGGTACAGCGGAGAT 198  
QY 79 GTCACAGCCCTGATGTGAATGATGAAAGAAACAGTTACCTTGACTACTGATTAAT 138  
DB 199 GTGAGTCTTTAATTCTGATGAAAGAGAAAAATTTATGAAATCTGGATGAAAAAT 258  
QY 139 GGAGCAGGTGCTGATGCTACTA 160  
259 CGAGTTGGGAAAGTGACATT 280  
RESULT 15  
US-09-173-151A-34  
Sequence 34, Application US/09173151A  
Patent No. 6326472  
GENERAL INFORMATION:  
APPLICANT: Timans, Jacqueline C.  
APPLICANT: Debets, Johannes Eduard Maria  
APPLICANT: Antonius  
APPLICANT: Sana, Theodore R.  
APPLICANT: Bazan, J. Fernando  
APPLICANT: Kastelein, Robert A.



*This Page Blank (uspto)*

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus.n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 6.60074 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-12  
Perfect score: 417  
Sequence: 1 GACACGAGCAATTCGCCAG.....CAGTGTAAAGTGGGCTC 235

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 seqs, 24425594 residues  
Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=framer.n2p.model -DEV=xlh  
-Q=/cgn2\_1/USPTO.spool/US09042696/runal.16102002.115821.24739/app\_query.fasta.1.13694  
-DB-Issued\_Patents\_AA -QFMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=biosum62 -TRANS=human40.cdl  
-LIST=45 -DOCLIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZ=500 -MINLEN=0 -MAXLEN=200000000  
-USPR=US09042696.ecgn.1.1.57-etunal.16102002.115821.24739 -ICPU=3  
-NO\_XLPHY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG -DEV\_TIMEDOUT=120  
-WANN\_TIMEDOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

Issued\_Patents\_AA:\*  
1: /cgn2\_6/prodata/2/iaa/5a\_COMB.pep:\*  
2: /cgn2\_6/prodata/2/iaa/5b\_COMB.pep:\*  
3: /cgn2\_6/prodata/2/iaa/6a\_COMB.pep:\*  
4: /cgn2\_6/prodata/2/iaa/6b\_COMB.pep:\*  
5: /cgn2\_6/prodata/2/iaa/PCUTS\_COMB.pep:\*  
6: /cgn2\_6/prodata/2/iaa/backfile1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	389	93.3	914	4	US-09-193-562D-28
2	291	69.8	903	4	US-09-193-562D-46
3	250	60.0	902	4	US-09-193-562D-34
4	247	59.2	1000	4	US-09-193-562D-30
5	243	58.3	795	4	US-09-193-562D-11
6	243	58.3	821	4	US-09-193-562D-12
7	243	58.3	905	4	US-09-193-562D-2
8	237	56.8	943	4	US-09-193-562D-32
9	111	26.6	228	1	US-08-469-667-9
10	111	26.6	228	1	US-09-224-110-9
11	111	26.6	228	5	PCT-US95-07289-9
12	66	15.2	1854	4	US-09-004-838-108

13	63.5	15.2	484	1	US-08-597-236-2	Sequence 2, App11
14	63.5	15.2	484	1	US-08-746-682A-2	Sequence 2, App11
15	62	14.9	857	2	US-08-779-113-2	Sequence 2, App11
16	62	14.9	858	2	US-08-583-562B-2	Sequence 2, App11
17	61	14.6	456	4	US-08-975-762-66	Sequence 66, App1
18	61	14.6	456	4	US-09-295-028-66	Sequence 66, App1
19	61	14.6	456	4	US-09-106-582-66	Sequence 66, App1
20	60.5	14.5	615	2	US-08-752-507B-9	Sequence 9, App11
21	60	13.8	630	2	US-08-797-366-3	Sequence 3, App11
22	60	13.8	630	2	US-08-956-268-3	Sequence 3, App11
23	59.5	14.3	347	4	US-09-094-557-3	Sequence 3, App11
24	58.5	14.0	179	4	US-08-339-214-22	Sequence 22, App1
25	58.5	14.0	279	4	US-08-339-214-24	Sequence 22, App1
26	58.5	14.0	279	4	US-08-339-214-32	Sequence 32, App1
27	58.5	14.0	279	5	PCT-US95-00362-5	Sequence 5, App11
28	58.5	14.0	788	2	US-08-918-814-4	Sequence 4, App11
29	57.5	13.8	158	1	US-08-403-866-8	Sequence 8, App11
30	57	13.7	473	4	US-09-240-639-12	Sequence 12, App1
31	57	13.5	1805	4	US-09-004-838-92	Sequence 92, App1
32	56.5	13.5	259	4	US-08-961-083-174	Sequence 174, App1
33	56.5	13.5	539	2	US-08-978-182-3	Sequence 3, App11
34	56.5	13.5	539	2	US-09-205-681-3	Sequence 3, App11
35	56.5	13.5	1112	2	US-08-714-402-2	Sequence 2, App11
36	56.5	13.5	1161	4	US-08-480-604A-28	Sequence 28, App1
37	56.5	13.5	1296	1	US-08-480-604A-28	Sequence 28, App1
38	56.5	13.5	1296	4	US-08-405-496A-28	Sequence 28, App1
39	56.5	13.5	1296	4	US-08-915-136-28	Sequence 28, App1
40	56	13.4	222	1	US-08-129-610-8	Sequence 8, App11
41	56	13.4	222	1	US-08-129-609A-8	Sequence 8, App11
42	56	13.4	222	1	US-08-455-313-8	Sequence 8, App11
43	56	13.4	222	1	US-08-475-324-3	Sequence 3, App11
44	56	13.4	222	2	US-08-657-579A-3	Sequence 3, App11
45	56	13.4	222	4	US-09-224-025-8	Sequence 8, App11

#### ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
; Sequence 28, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193, 562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065, 922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 28  
; LENGTH: 914  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-28

Alignment Scores:

Pred. No.: 3.02e-46  
Score: 389.00  
Percent Similarity: 100.00%  
Best local Similarity: 98.72%  
Query Match: 93.29%  
DB: 4  
Length: 914  
Matches: 77  
Conservative: 1  
Mismatches: 0  
Indels: 0  
Gaps: 0

US-09-049-696-12 (1-235) x US-09-193-562D-28 (1-914)

QY 1 GACGCGAGCAATTCGCCAGCCCTGCTGATTATGCAATATTCGCAAGAGCCTCC 60  
DB 600 AsprhsrlysrlysphepseproleuValValYrYlaasnleatgInglYAlaser 619  
QY 61 CCAATTCAGGGGCGACATGTCACAGCCCTGATTGATGATGGAAGAAACAGTACC 120  
|||||

```

Db      620  ProLeuArgAlaSerValThrAlaLeuIleGluSerValAsnGlyLysThrValIhr 639
Qy      121  TTGCACACTACGCGATTAATGCAGCAGCTCTCATGCTACTAAAGATGACGGTGTCTACTCA 180
          |||
          LeuIleuAspAsnGlyAlaGlyAlaAspAlaThrLysAspAspGlyValTyrIser 659
Qy      181  AGGATATTCACACACTTATGATGACGACGATGTTGATACAGTGTAAAAAGTCCGGGCT 234
          |||
          ArgTyrPheThrThrTyrAspThrAsnGlyArgTyrIserValLysValArgAla 677
Db      660  ArgTyrPheThrThrTyrAspThrAsnGlyArgTyrIserValLysValArgAla 677

RESULT 2
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016
; US-09-193-562D-46

```

```

Alignment Scores:
Pred. NO.: 1.93e-32 Length: 903
Score: 291.00 Matches: 55
Percent Similarity: 84.62% Conservative: 11
Best Local Similarity: 70.51% Mismatches: 12
Query Match: 69.78% Indels: 0
DB: 4 Gaps: 0

US-09-049-696-12 (1-235) x US-09-193-562D-46 (1-903)
QY 1 GACACCCAGCAATTCGCCAGCCCTCTGGTAGTTATGCAATATTCGCCAAGAGCCTCC 60
   |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||:
Db 607 ASnhrhAlAhstYrPrOserPrOvAlleVrAlAGlnValserGlnclYrheU 62
QY 61 CCAATTCTCAGGGCCAGTGTCAACGCCCTGATTGAATCAGTGAATGAAAAACAGTACC 12
   |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||:
   |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||:
Db 627 PrOvAlleAGlnYlLeAsnValThrAlleleGlnclYrThGlnuAspGlyHISGlnValThr 64
QY 121 TTGGACACACGSGAATGAAGAGCGAGGTCTATGCTACTAAGAGAGCGGTCTACTCA 18
   |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||:
Db 647 leuGlnleuTrpAspAsnGlyAlAcLYAlAspAlaTrnLYAspAspGlyValYrser 66
QY 181 AGGATATTCACAACTTATGACACAGCAATGTTGATGATCACTGTAAGAGTCCGGGCT 234
   |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||:
   |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||: |||||:
Db 667 ArgYrPheTrnTrhTYrAspThrAsnclYrArgYrSerValLYsValHISAla 684

RESULT 3
US-09-193-562D-34
: Sequence 34, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedict U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193.562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065.922
: PRIOR FILING DATE: 1997-11-17

```

```

:      NUMBER OF SEQ ID NOS: 47
:      SEQ ID NO 34
:      LENGTH: 902
:      TYPE: PRT
:      ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.:      1,156-26
Score:          250.00
Percent Similarity: 80.26%
Best Local Similarity: 61.84%
Query Match:     59.95%
DB:              4

length: 902
Matches: 47
Conservative: 14
Mismatches: 15
Indels: 0
Gaps: 0

```

US-09-049-696-12 (1-235) x US-09-193-562D-34 (1-902)

QY	4	ACGACGCAAAATTTCCCGAGCCCTCTGTGATGATTTATTCGCAAAATATTTCCGCAAGAGCCCTCCCA	63
Db	606	ThrlaaglnlYrPProSerArgmclleValYrLrlarYalSerGlnGlyPheLeuPro	6259
QY	64	ATTTCAGGGGCAGTGCACAGCCCTGATTCATGACAGTGAATGGAATAACAGTTACCTTG	123
Db	626	ValleuagtlYalasnValThrlAlaLeuIlleGlnLaagluhIsglYhIsglnValThleu	6435
QY	124	GAACTACTGATTAATGGAGCAGGTGCTGATGCTACTAAGATGACGGGTGCTACTACAG	183
Db	646	GlutLeuTrpAspanglYalaglYalAspIleValYalYsAsnAspGlyIleYrThlArg	665
QY	184	TATTTCCAACTTTATGCACACAAATGGTAGATACAGTGTAATAACGCGG	231
Db	666	TyrPheThrAspTrYrhlIsglYalasnGlylArGlyrSerLeuYsValAlarg	681

[illegible]





```
QY      184  TATTTCAACAATTATGACACCGAATGGTAGATACAGTGTAAAGTGGGGCT 234
          |||  |||  |||  |||  |||  |||  |||  |||  |||  |||  |||
Db      669  TyrPheThrAspTyrTyrGlyAsnGlyArgTyrSerLeuIysValHisAla 685
```

RESULT 8  
US-09-193-562D-32  
; Sequence 32, Application US/09193562D

```

1 GENERAL INFORMATION:
2 APPLICANT: Palli, Benedict U.
3 TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
4 TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
5 FILE REFERENCE: 18617.0052
6 CURRENT APPLICATION NUMBER: US/09/193.562D
7 CURRENT FILING DATE: 1998-11-17
8 PRIOR APPLICATION NUMBER: US/60/065,922
9 PRIOR FILING DATE: 1997-11-17
10 NUMBER OF SEQ ID NOS: 47
11
12 SEQ ID NO 32

```

Pred. No.:	7.93e-25	length:	943
Score:	237.00	Matches:	43
Percent Similarity:	76.32%	Conservative:	15
Best Local Similarity:	56.58%	Mismatches:	18
Query Match:	56.83%	Indels:	0
DB:	4	Gaps:	0

US-09-049-696-12 (1-235) x US-09-193-562D-32 (1-943)

QY 1 GACACCAGCAAAATTTCCCGGCCCTGTGGTATTATTAATGGAATATATGCCCAAGGAGCCTCC 60  
|||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||:::  
Db 614 AspSerLeuHisPheProHisAspProValMetIleTyrlaAlasnaValysGlnGlyPheTyr 633  
||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
QY 61 CCAATTCCTAGGCGCCAGTGCTCACACCCCTGATTGCATCATGGAATGGGAAAAACAGTTACC 120  
||||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||:::  
Db 634 ProIleIleasnAlaThrValThrValaIhrValGIuProGluThrGlyAspProvalThr 653  
|||||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||:::  
QY 121 TTGGAATACTAGATATGAGACAGCGTGCTGATCTACTAAGAATGACGGGTGTACTCA 180  
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
Db 654 LeuArgLeuLeuaspAspPolylalaglylaAspValIleTlysAanaspGlyIleTyrSer 673  
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||  
QY 181 AGGTAATTCACAACCTTAGCACACAGAAATGGTAGATCAATGTAAAAGT 228  
|||||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||:::  
Db 674 ArgTyrPhePheSerPheIleAlaIleasnGlylalygIySerylLeuVal 699  
|||||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||::: |||:::

U/LT 9  
08-469-667-9

```

1  GENERAL INFORMATION:
2  APPLICANT:  Yu, Guo-Liang
3  TITLE OF INVENTION:  Colon Specific Genes and Proteins
4  APPLICANT:  Rosen, Craig
5  TITLE OF INVENTION:  Colon Specific Genes and Proteins
6  NUMBER OF SEQUENCES:  24
7  CORRESPONDENCE ADDRESSES:
8  ADDRESSSEE:  Carcella, Byrne, Bath, Gillfillan, Cecchi,
9  ADDRESSSEE:  Stewart & Olstein
10 STREET:  6 Becker Farm Road
11 CITY:  Roseland
12 STATE:  NJ
13 COUNTRY:  USA
14 ZIP:  07068-1739
15 COMPUTER READABLE FORM:
16 MEDIUM TYPE:  Floppy disk
17 COMPUTER:  IBM PC compatible
18 OPERATING SYSTEM:  PC-DOS/MS-DOS
19 SOFTWARE:  Patentin Release #1.0, Version #1.30
20 CURRENT APPLICATION DATA:

```

APPLICATION NUMBER: US/08/469,667  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:

NAME: ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700

TELETYPE. 201 004 1000  
; INFORMATION FOR SEQ ID NO: 9  
SEQUENCE CHARACTERISTICS:

```

;
; SEQUENCE CHARACTERISTICS
; LENGTH: 228 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

```

Alignment scores:	
Pred. No.:	2.69e-07
Score:	111.00
Percent Similarity:	100.00%
Best Local Similarity:	100.00%
Query Match:	26.62%
DB:	1
Length:	228
Matches:	21
Conservative:	0
Mismatches:	0
Indels:	0
Gaps:	0

US-09-049-696-12 (1-235) x US-08-469-667-9 (1-228)

QY 172 GTCCTCAAGTATTTCACAACCTTACACAGATGTAGATACAGTGTAAAGTCGG 233  
|||||  
Db 1 VALTYSerArgTtyPheThrTtyrSprHrsngIyArgTyrSerValIysValArg 20

QY	232	GCT	234
Db	21	Ala	21

RESULT 10  
US-09-224-110-9

```

/
/  GENERAL INFORMATION:
/
/  APPLICANT:  Yu, Guo-Liang
/
/  APPLICANT:  Rosen, Craig
/
/  TITLE OF INVENTION:  Colon Specific Genes and Proteins
/
/  NUMBER OF SEQUENCES:  24
/

```

ADDRESS: Carella, Byrne, Bain, Giffillan, Cecchi,  
ADDRESS: Stewart & Olstein  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ

```

? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? COMPUTER: IBM PC compatible
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: Patent In Release #1.0, Version #1.30
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: 05/09/224,110

```

CLASSIFICATION:   
PRIOR APPLICATION DATA:   
APPLICATION NUMBER: 08/469,667   
FILING DATE: 06-JUN-1995   
ATTORNEY/AGENT INFORMATION:   
NAME: Petrarco, Gregory D.   
REGISTRATION NUMBER: 36,134   
REFERENCE/DOCKET NUMBER: 355800-435   
TELECOMMUNICATION INFORMATION:   
TELEPHONE: 201-994-1700   
TELEFAX: 201-994-1744   
INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:  
LENGTH: 228 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-09-224-110-9

## Alignment Scores:

Pred. No.:	2.69e-07	Length:	228
Score:	111.00	Matches:	21
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	26.62%	Indels:	0
DB:	4	Gaps:	0

US-09-049-696-12 (1-235) x US-09-224-110-9 (1-228)

OY 172 GCTACTCAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGCG 231  
|||||  
1 VAlTYSerArGTyPheThrThrTyRAspThRAsnGLyArGTySerVallySValArG 20

OY 232 GCT 234  
|||  
DB 21 Ala 21

## RESULT 11

PCT-US95-07289-9

Sequence 9, Application PC/TUS9507289

GENERAL INFORMATION:

APPLICANT: Yu, Guo-Liang

APPLICANT: Rosen, Craig

TITLE OF INVENTION: Colon Specific Genes and Proteins

NUMBER OF SEQUENCES: 24

CORRESPONDENCE ADDRESS:

ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,

ADDRESSEE: Stewart &amp; Olstein

STREET: 6 Becker Farm Road

CITY: Roseland

STATE: NJ

COUNTRY: USA

ZIP: 07068-1739

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/07289

FILING DATE: 06-JUN-1995

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Ferraro, Gregory D.

REGISTRATION NUMBER: 36,134

REFERENCE/DOCKET NUMBER: 325800-265

TELECOMMUNICATION INFORMATION:

TELEPHONE: 201-994-1700

TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 9:

SEQUENCE CHARACTERISTICS:

LENGTH: 228 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

PCT-US95-07289-9

## Alignment Scores:

Pred. No.:	2.69e-07	Length:	228
Score:	111.00	Matches:	21
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	26.62%	Indels:	0
DB:	5	Gaps:	0

US-09-049-696-12 (1-235) x PCT-US95-07289-9 (1-228)

OY 172 GCTACTCAGGTATTTCACACTTATGACAGCAATGTAGATACAGTGTAAAGTGGCG 231  
|||||  
DB 1 VAlTYSerArGTyPheThrThrTyRAspThRAsnGLyArGTySerVallySValArG 20

OY 232 GCT 234  
|||  
DB 21 Ala 21

## RESULT 12

US-09-004-838-108

Sequence 108, Application US/09004838

Patent No. 6350933

GENERAL INFORMATION:

APPLICANT: Michelmere, Richard W.

APPLICANT: Shen, Kathy

TITLE OF INVENTION: Procedures and Materials for

CONFERRING PEST RESISTANCE IN PLANTS

NUMBER OF SEQUENCES: 140

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP

STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/004,838

FILING DATE: 09-JAN-1998

CLASSIFICATION: 800

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/781,734

FILING DATE: 10-JAN-1997

ATTORNEY/AGENT INFORMATION:

NAME: Einhorn, Gregory P.

REGISTRATION NUMBER: 38,440

REFERENCE/DOCKET NUMBER: 023070-078810US

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 108:

SEQUENCE CHARACTERISTICS:

LENGTH: 1854 amino acids

TYPE: amino acid

STRANDEDNESS:

TOPOLOGY: linear

MOLECULE TYPE: protein

FEATURE:

NAME/KEY: -

LOCATION: 1..1854

OTHER INFORMATION: /note= "RG2J deduced sequence"

US-09-004-838-108

## Alignment Scores:

Pred. No.:	1.24	Length:	1854
Score:	66.00	Matches:	22
Percent Similarity:	56.25%	Conservative:	5
Best Local Similarity:	45.83%	Mismatches:	20
Query Match:	15.17%	Indels:	1
DB:	4	Gaps:	0

US-09-049-696-12 (1-235) x US-09-004-838-108 (1-1854)

OY 167 TCATCTTAGTACATGACACCTGCTCCATTATCAAGTACAGTGTATTTT 108  
|||||  
DB 1454 SerSerSerSerSerSerSerSerProProSerSerSerlySlyValValValPhe 1473

QY 107 CCATTCACGTATTCACGAGGCTGTGACACTGCGCCCTGAGAAATTGGGAGAGCTCTTGG 48  
Db 1474 ProcyonleuylserilValleuValAsnleu-ProgluValGlyPhePheleuGI 1493  
QY 47 CGAATATTGGATTAACCA 26  
Db 1493 ymelasngluPheArgleuPro 1500

RESULT 13  
US-08-597-236-2  
; Sequence 2, Application US/08597236  
; Patent No. 5733765  
; GENERAL INFORMATION:  
; APPLICANT: STINGELE, Francesca  
; APPLICANT: MOLETT, Beat  
; TITLE OF INVENTION: LACTIC BACTERIA PRODUCING  
; TITLE OF INVENTION: EXOPOLYSACCHARIDES  
; NUMBER OF SEQUENCES: 19  
; CORRESPONDENCE ADDRESSES:  
; ADDRESSEE: Pennie & Edmonds  
; STREET: 1155 Avenue of the Americans  
; City: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/597,236  
; FILING DATE:  
; CLASSIFICATION: 426  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: EP 95201669.9  
; FILING DATE: 20-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fanucci A., Allan  
; REGISTRATION NUMBER: 30256  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 484 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-597-236-2

Alignment Scores:  
d. No.: 1.73 Length: 484  
Score: 63.50 Matches: 22  
Percent Similarity: 47.37% Conservative: 14  
Best Local Similarity: 28.95% Mismatches: 31  
Query Match: 15.23% Indels: 9  
Gaps: 3

US-09-049-696-12 (1-235) x US-08-597-236-2 (1-484)

QY 34 TATGCAAAATTTGGCCAGAGGCTCCCA-----ATTCTCAGGGCCAGTGTACAGCC 87  
Db 174 TYRASPASNleuylserGlySerLysAlaMetValleuSerGlySerTyraIaSer 193  
QY 88 CTGATTGATCAGTG-----AATGAAAAACAGT---ACCTTGGA 126  
Db 194 LeuIeuGluSerValAspSerAsnTyraIaSerAsnleuylThrIleTyrrThyIys 213  
QY 127 CTACTGATTAATGACGAGGCTGTGATGCTACTAAGATGACGCTGTCTACTCAAGGTAT 186  
Db 214 IleIysLysLysAsnSerAsnSerAlaAsnGluValAspSerArgIaPheAsnIleTy 233  
QY 187 TTCACAACCTTAATGACGAATGTAGATACAGTGTAAAGTGGGGCT 234  
::: ||||| ||| |||:::

Db 234 IleSerGlyIleAspThyTrGlyProIleSerThrValSerArgSer 249

RESULT 14  
US-08-746-682A-2  
; Sequence 2, Application US/08746682A  
; Patent No. 5786184  
; GENERAL INFORMATION:  
; APPLICANT: STINGELE, Francesca  
; APPLICANT: MOLETT, Beat  
; TITLE OF INVENTION: LACTIC BACTERIA PRODUCING  
; TITLE OF INVENTION: EXOPOLYSACCHARIDES  
; NUMBER OF SEQUENCES: 19  
; CORRESPONDENCE ADDRESSES:  
; ADDRESSEE: Pennie & Edmonds  
; STREET: 1155 Avenue of the Americans  
; City: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 10036  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: IBM PC compatible  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/746,682A  
; FILING DATE: 14-NOV-1996  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/597,236  
; FILING DATE: 20-JUN-1995  
; APPLICATION NUMBER: EP 95201669.9  
; FILING DATE: 20-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Fanucci A., Allan  
; REGISTRATION NUMBER: 30256  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 484 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-746-682A-2

Alignment Scores:  
Pred. No.: 1.73 Length: 484  
Score: 63.50 Matches: 22  
Percent Similarity: 47.37% Conservative: 14  
Best Local Similarity: 28.95% Mismatches: 31  
Query Match: 15.23% Indels: 9  
Gaps: 3

US-09-049-696-12 (1-235) x US-08-746-682A-2 (1-484)

QY 34 TATGCAAAATTTGGCCAGAGGCTCCCA-----ATTCTCAGGGCCAGTGTACAGCC 87  
Db 174 TYRASPASNleuylserGlySerLysAlaMetValleuSerGlySerTyraIaSer 193  
QY 88 CTGATTGATCAGTG-----AATGAAAAACAGT---ACCTTGGA 126  
Db 194 LeuIeuGluSerValAspSerAsnTyraIaSerAsnleuylThrIleTyrrThyIys 213  
QY 127 CTACTGATTAATGACGAGGCTGTGATGCTACTAAGATGACGCGTGTCTACTCAAGGTAT 186  
Db 214 IleIysLysLysAsnSerAsnSerAlaAsnGluValAspSerArgIaPheAsnIleTy 233  
QY 187 TTCACAACCTTAATGACGAATGTAGATACAGTGTAAAGTGGGGCT 234  
Db 234 IleSerGlyIleAspThyTrGlyProIleSerThrValSerArgSer 249  
RESULT 15  
US-08-779-113-2  
; Sequence 2, Application US/08779113

Patent No. 5948891  
GENERAL INFORMATION:  
APPLICANT: Staunton, Donald E.  
APPLICANT: Harris, Edith S.  
TITLE OF INVENTION: Cytoplasmic Modulators of Integrin  
TITLE OF INVENTION: Binding  
NUMBER OF SEQUENCES: 65  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun  
STREET: 233 South Wacker Drive, 6300 Sears Tower  
CITY: Chicago  
STATE: Illinois  
COUNTRY: United States of America  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/779,113  
FILING DATE:  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Greta E. No. 5948891and  
REGISTRATION NUMBER: 35,302  
REFERENCE/DOCKET NUMBER: 27866/33773  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 312-474-6300  
TELEFAX: 312-474-0448  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 857 amino acids  
TYPE: amino acid  
TOPOLOGY: not relevant  
MOLECULE TYPE: protein  
US-08-779-113-2

Alignment Scores:  
Pred. No.: 3.46 Length: 857  
Score: 62.00 Matches: 19  
Percent Similarity: 45.00% Conservative: 8  
Best Local Similarity: 31.67% Mismatches: 19  
Query Match: 14.87% Indels: 14  
DB: 2 Gaps: 2

09-049-696-12 (1-235) x US-08-779-113-2 (1-857)

UY 16 CCCAGCCCTGAGTATTATGCAATATTCGCCAAGAGGCTCCCAATTCTCAGGGCC 75  
||| |||||::: ||| ::|||::|||  
Db 1 ProheaspLeuValIleProhealValArgLysGly----- 13  
UY 76 AGTGTACAGCCCTGATGAGTATGATGAAATGAAACAGTTACCTTGAACTACTGCGAT 135  
::: ||| :::: ||||| ||| |||::: |||  
Db 14 GlutlethrlGluIuValHlsmetProserGlyLysThrAlaThrProGluIleValasp 33  
UY 136 AATGAGCAGGCTGATGCTACTAAGAGTACAGCGTGTCTACTCAAGGTATTCACAAC 195  
||| ||||| ||| ||| ||||| |||  
Db 34 Asn-----LysaspGlyThrValThrValArgTyrAlaProThr 46

Search completed: October 17, 2002, 17:59:37  
Job time : 9.60073 secs

*This Page Blank (uspto)*

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 : Search time 6.88225 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-11

Perfect score: 191  
Sequence: 1 GGCTTTGTAGTGCACCAAAA.....AACAGGACACACCAATTT 191

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Archived: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_NA.\*  
1: /cgn2\_6/plodata/2/1na/5A\_COMB.seq.\*  
2: /cgn2\_6/plodata/2/1na/5B\_COMB.seq.\*  
3: /cgn2\_6/plodata/2/1na/6A\_COMB.seq.\*  
4: /cgn2\_6/plodata/2/1na/6B\_COMB.seq.\*  
5: /cgn2\_6/plodata/2/1na/PCtus\_COMB.seq.\*  
6: /cgn2\_6/plodata/2/1na/Backfile1.seq.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match length	ID	Description
1	191	100.0	3007	US-09-193-562D-27 Sequence 27, Appl
2	35.8	18.7	3317	US-09-193-562D-1 Sequence 1, Appl
3	31	16.2	2970	US-09-193-562D-31 Sequence 31, Appl
4	30.4	15.9	10380	US-09-077-354B-3 Sequence 3, Appl
5	29	15.2	1123	US-09-188-930-28 Sequence 28, Appl
6	29	15.2	1123	US-09-188-930-203 Sequence 203, App
7	28.6	15.0	2172	US-08-760-615-1 Sequence 1, Appl
8	28.2	14.8	3418	US-09-193-562D-29 Sequence 29, Appl
9	28.2	14.8	3833	US-08-917-320-18 Sequence 18, Appl
10	28.2	14.8	3833	PCT-US95-04611A-18 Sequence 18, Appl
11	28.2	14.8	5931	US-08-783-774-1 Sequence 1, Appl
12	28.2	14.8	17056	US-09-245-041-3 Sequence 3, Appl
13	27.6	14.5	2619	US-08-337-797A-1 Sequence 1, Appl
14	27.6	14.5	2619	US-08-337-797A-3 Sequence 3, Appl
15	27.6	14.5	2619	US-09-258-523-1 Sequence 1, Appl
16	27.6	14.5	2619	US-09-258-523-3 Sequence 3, Appl
17	27.2	14.2	3022	US-09-193-562D-33 Sequence 33, Appl
18	26.8	14.0	11236	US-07-853-913-1 Sequence 1, Appl
19	26.6	13.9	1920	US-08-186-222-1 Sequence 1, Appl
20	26.6	13.9	2689	US-08-876-546A-15 Sequence 15, Appl
21	26.6	13.9	2689	US-09-412-252-15 Sequence 15, Appl
22	26	13.6	2061	US-08-204-656B-9 Sequence 9, Appl
23	26	13.6	2061	US-08-470-702-5 Sequence 5, Appl
24	26	13.6	2061	US-08-467-831-5 Sequence 5, Appl
25	25.8	13.5	1869	US-09-305-381-1 Sequence 1, Appl
26	25.8	13.5	2374	US-08-466-589-5 Sequence 5, Appl
27	25.8	13.5	2374	US-08-700-636-5 Sequence 5, Appl

28	25.8	13.5	2374	US-08-467-574-5 Sequence 5, Appl
29	25.8	13.5	2374	US-09-217-345-5 Sequence 5, Appl
30	25.8	13.5	4403765	US-09-103-840A-2 Sequence 2, Appl
31	25.8	13.5	4411529	US-09-103-840A-1 Sequence 1, Appl
32	25.6	13.4	1058	US-08-238-163-1 Sequence 1, Appl
33	25.6	13.4	4615	US-08-674-351-3 Sequence 3, Appl
34	25.4	13.3	823	US-08-998-416-493 Sequence 493, App
35	25.4	13.3	2580	US-08-511-853-16 Sequence 16, Appl
36	25.4	13.3	2742	US-08-911-853-16 Sequence 16, Appl
37	25.4	13.3	2742	US-09-479-409-16 Sequence 16, Appl
38	25.4	13.3	2742	US-09-479-453-16 Sequence 16, Appl
39	25.4	13.3	7102	US-09-138-024-20 Sequence 20, Appl
40	25.4	13.3	17612	US-08-911-853-29 Sequence 29, Appl
41	25.4	13.3	17612	US-09-479-409-29 Sequence 29, Appl
42	25.4	13.3	17612	US-09-479-453-29 Sequence 29, Appl
43	25.2	13.2	59065	US-09-813-817-3 Sequence 3, Appl
44	24.8	13.0	168	US-08-697-329-7 Sequence 7, Appl
45	24.8	13.0	1398	US-08-896-320-2 Sequence 2, Appl

## ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
: Sequence 27, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193, 562D
: PRIOR FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065, 922
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 27
: LENGTH: 3007
: TYPE: DNA
: ORGANISM: Homo sapiens
: US-09-193-562D-27

Query Match          100.0%: Score 191; DB 4; Length 3007;
Best Local Similarity 100.0%: Pred. No. 3.3e-60;
Matches 191; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGCTTTGTAGTGCACCAAAAACACCAAAATGGCTACTCTCAATCCCGAGCATTCCTAG 60
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
DB 1667 GGCTTTGTAGTGCACCAAAAACACCAAAATGGCTACTCTCAATCCCGAGCATTCCTAG 1726

QY 61 GTTGCACCTTGAATATACAGTCTGCACCAAGCTCACAACCTTGTACCTGACTGTACG 120
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
DB 1727 GTTGCACCTTGAATATACAGTCTGCACCAAGCTCACAACCTTGTACCTGACTGTACG 1786

QY 121 TCCCGTGGTCCAAATGACCTGCTCAATATACAGTCTTCCAAAGCAAGCAAGAGC 180
    ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
DB 1787 TCCCGTGGTCCAAATGACCTGCTCAATATACAGTCTTCCAAAGCAAGCAAGAGC 1846

QY 181 ACCACCAATTT 191
    |||||||||||
DB 1847 ACCACCAATTT 1857

RESULT 2
US-09-193-562D-1
: Sequence 1, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE REFERENCE: 18617.0052
```





Patent No. 6150502  
GENERAL INFORMATION:  
APPLICANT: Watson, James D.  
APPLICANT: Strachan, Lorna  
APPLICANT: Sleeman, Matthew  
APPLICANT: Onrust, Rene  
TITLE OF INVENTION: Compositions Isolated From Skin Cells  
TITLE OF INVENTION: and Methods For Their Use  
FILE REFERENCE: 11000.1011c1  
CURRENT APPLICATION NUMBER: US/09/188.930A  
CURRENT FILING DATE: 1998-11-09  
NUMBER OF SEQ ID NOS: 348  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 28  
LENGTH: 1123  
TYPE: DNA  
ORGANISM: Rat  
US-09-188-930-28

Query Match 15.2%; Score 29; DB 3; Length 1123;  
Best Local Similarity 63.8%; Pred. No. 0.46;  
Matches 44; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

OY 16 AAAACACCAAAATGGCTACCTCCAAATCCAGGCGATTGCTAAGTTGGCACTTGAA 75  
DB 767 AACAAAGGAAATCAGATACATCCAGCAACCATGCTGCTGAAGTTGGCCAAAGGAGA 826  
OY 76 TACAGCTTG 84  
DB 827 TGAAGCTTG 835

RESULT 6  
US-09-188-930-203  
Sequence 203; Application US/09188930A  
Patent No. 6150502  
GENERAL INFORMATION:  
APPLICANT: Watson, James D.  
APPLICANT: Strachan, Lorna  
APPLICANT: Sleeman, Matthew  
APPLICANT: Onrust, Rene  
TITLE OF INVENTION: Compositions Isolated From Skin Cells  
TITLE OF INVENTION: and Methods For Their Use  
FILE REFERENCE: 11000.1011c1  
CURRENT APPLICATION NUMBER: US/09/188.930A  
CURRENT FILING DATE: 1998-11-09  
NUMBER OF SEQ ID NOS: 348  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 203  
LENGTH: 1123  
TYPE: DNA  
ORGANISM: Rat  
US-09-188-930-203

Query Match 15.2%; Score 29; DB 3; Length 1123;  
Best Local Similarity 63.8%; Pred. No. 0.46;  
Matches 44; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

OY 16 AAAACACCAAAATGGCTACCTCCAAATCCAGGCGATTGCTAAGTTGGCACTTGAA 75  
DB 767 AACAAAGGAAATCAGATACATCCAGCAACCATGCTGCTGAAGTTGGCCAAAGGAGA 826  
OY 76 TACAGCTTG 84  
DB 827 TGAAGCTTG 835

RESULT 7  
US-08-760-615-1  
Sequence 1; Application US/08760615  
Patent No. 6200959

GENERAL INFORMATION:  
APPLICANT: Haynes, Joel R  
APPLICANT: Schmaljohn, Connie S  
APPLICANT: Fuller, Deborah L  
APPLICANT: Schmaljohn, Alan  
APPLICANT: Jahrling, Peter B  
TITLE OF INVENTION: GENETIC INDUCTION OF ANTI-VIRAL IMMUNE  
TITLE OF INVENTION: RESPONSE AND GENETIC VACCINE FOR FILOVIRUS  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Quarles & Brady  
STREET: 1 South Pinckney Street  
CITY: Madison  
STATE: WI  
COUNTRY: US  
ZIP: 53703  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/760.615  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Berson, Bennett J  
REGISTRATION NUMBER: 37094  
REFERENCE/DOCKET NUMBER: 110229.91241  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 608-251-5000  
TELEFAX: 608-251-9166  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2172 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
ORIGINAL SOURCE:  
ORGANISM: Ebola virus  
STRAIN: Zaire  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 142..2172  
OTHER INFORMATION: /product= "Glycoprotein"  
US-08-760-615-1

Query Match 15.0%; Score 28.6; DB 4; Length 2172;  
Best Local Similarity 48.0%; Pred. No. 0.89;  
Matches 82; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

OY 12 GGACAAAACCAAAATGGCTACCTCCAAATCCAGGCGATTGCTAAGTTGGCACTTG 71  
DB 1293 GGACAAAGCAAGCAACCCATATATACCCCGGTATTAACCTGATGAGCAATCAAGT 1352  
OY 72 GAATACAGCTGCGAAGCAAGCTCACAACCTTGACCTGACTGCTACAGTCCCGTGC 131  
DB 1353 TGAACATATCACCACCAAGACAGACAGACAGACAGCTCCGACCTCCCTCGCAC 1412  
OY 132 CAATGCTACCTGCTCCAAATTAAGTACAGTCTCCAAAGCAAGCAAGGACAC 182  
DB 1413 GACCGACCGGACCCCAAAAGCAGACACCAACGACGACGACGACGACGAC 1463

RESULT 8  
US-09-193-562D-29  
Sequence 29; Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules

FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193,562D  
CURRENT FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 29  
LENGTH: 3418  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-29

Query Match  
Best Local Similarity 68.4%; Pred. No. 1.6;  
Matches 39; Conservative 0; Mismatches 18; Indels 0; Gaps 0;

14.8%; Score 28.2; DB 1; Length 3833;  
Best Local Similarity 59.3%; Pred. No. 1.7;  
Matches 48; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Query 31 GCCTACTCCAAATCCAGCATGTGTCAGCTTGAATAACAGCTGCGAA 87  
DB 1738 GCCCGCTTCGAATACAGCATGTGTCAGAGACAGCGACTTGACTTACAGCGTTGCA 1794

ULT 9  
08-917-320-18  
Sequence 18, Application US/08917320  
Patent No. 5824508  
GENERAL INFORMATION:  
APPLICANT: Spaete, Richard and Jackman, Winthrop, T.  
TITLE OF INVENTION: No. 5824508 Splicing Variants of gp350/220.  
NUMBER OF SEQUENCES: 18  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Cooley Godward Castro Huddleson & Tatum  
STREET: 5 Palo Alto Square  
CITY: Palo Alto  
STATE: California  
COUNTRY: USA  
ZIP: 94306  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/917,320  
FILING DATE: 25-AUG-1997  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/229,291  
FILING DATE: April 18, 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Luann Cseri  
REGISTRATION NUMBER: 31,822  
REFERENCE/DOCKET NUMBER: AVIR-003/000US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-843-5163  
TELEFAX: 415-857-0663  
TELEX: 380816 CooleyPA  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 3833 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: unknown  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1014..3734  
US-08-917-320-18

Query Match  
Best Local Similarity 14.8%; Score 28.2; DB 1; Length 3833;  
Matches 48; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Query 106 ACCCTGACTGTACAGTCCCGTGGCTCAATGCTACCTGCTCCATTTACAGTACTTCC 165

DB 2583 ACCCCAGCAGTACTACCCCAACCCCAATGCGACAGCCGCCAGCAGTACTACC 2642  
QY 166 AAAACGAACAGACACCCAGC 186  
DB 2643 CCAACCCCAATGCGACAGC 2663

RESULT 10  
PCT-US95-04611A-18  
Sequence 18, Application PC/TUS9504611A  
GENERAL INFORMATION:  
APPLICANT: Spaete, Richard and Jackman, Winthrop, T.  
TITLE OF INVENTION: Non Splicing Variants of gp350/220  
NUMBER OF SEQUENCES: 19  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Cooley Godward Castro Huddleson & Tatum  
STREET: 5 Palo Alto Square  
CITY: Palo Alto  
STATE: California  
COUNTRY: USA  
ZIP: 94306  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/04611A  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/229,291  
FILING DATE: April 18, 1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Luann Cseri  
REGISTRATION NUMBER: 31,822  
REFERENCE/DOCKET NUMBER: AVIR-003/000US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-843-5163  
TELEFAX: 415-857-0663  
TELEX: 380816 CooleyPA  
INFORMATION FOR SEQ ID NO: 18:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 3833 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: unknown  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1014..3734  
PCT-US95-04611A-18

Query Match  
Best Local Similarity 14.8%; Score 28.2; DB 5; Length 3833;  
Matches 48; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Query 106 ACCCTGACTGTACAGTCCCGTGGCTCAATGCTACCTGCTCCATTTACAGTACTTCC 165  
DB 2583 ACCCCAGCAGTACTACCCCAACCCCAATGCGACAGCCGCCAGCAGTACTACC 2642  
QY 166 AAAACGAACAGACACCCAGC 186  
DB 2643 CCAACCCCAATGCGACAGC 2663

RESULT 11  
US-08-783-774-1  
Sequence 1, Application US/08783774  
Patent No. 6054130  
GENERAL INFORMATION:

```

Query Match 14.8%; Score 28.2; DB 3; Length 5931;
Best Local Similarity 59.3%; Pred. No. 2.1;
Matches 48; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

106 ACCCTGACTGTGACGTCCTCCGTCGCTCAATGCTACCTGCTCCATTAAGTAGTCTTC 165
||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
2583 ACCCCAGCAGTAGTACTACCCCAACCCCAATATGACACACCCACCCACCCAGTAGTACC 2642
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

QY 166 AAACGAAACAAGACACACGAC 186
||||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

Db 2643 CCAACCCCAATGCAACACGAC 2663

RESULT 12
US-09-245-041-3
; Sequence 3, Application US/09245041
; Patent No. 6274339
; GENERAL INFORMATION:
; APPLICANT: Moore, K.
; APPLICANT: Nagle, D.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE DIAGNOSIS AND TREATMENT
; TITLE OF INVENTION: OF BODY WEIGHT DISORDERS INCLUDING OBESITY
; FILE REFERENCE: 7853-136
; CURRENT APPLICATION NUMBER: US/09/245,041
; CURRENT FILING DATE: 1999-02-05
; EARLIER APPLICATION NUMBER: 60/093,630
; EARLIER FILING DATE: 1998-07-21
; EARLIER APPLICATION NUMBER: 60/104,978
; EARLIER FILING DATE: 1998-10-20
; NUMBER OF SEQ ID NOS: 131
; SOFTWARE: FASTSEQ for Windows Version 3.0

```

	Query Match	Similarity	Score	DB	Length
Ob	2430	AAAGAGGCGACGCAACACCGAGACCCCTCGAGCTGTGACTGCACGACCATGGTGTGGT	52.68	2.3	2371
Matches	60	Conservative	0	Mismatches	54
				Indels	0
				Gaps	0
Oy	75	ATACAGTCTGCAGCAAGCTCACAAACCTTGACCTGACTGTCACTGACGTCCTGGCTGCCAA			134

OY 135 TGTACCTGCTCCATTACAGTCTCCAAAGACAGACAGCA 188  
|||||  
Db 2370 CTGTACCGGTAGTACTGAGGTGACATAGAAAGATGGCAGAAATGCCAGCCA 2317

## RESULT 14

US-08-337-797A-3/c

; Sequence 3, Application US/08337797A

; Patent No. 6017697

; GENERAL INFORMATION:

; APPLICANT: Burnett, J. P.

; APPLICANT: Mayne, Nancy G.

; APPLICANT: Sharp, Robert L.

; APPLICANT: Snyder, Yvonne M.

; TITLE OF INVENTION: EXCITATORY AMINO ACID RECEPTOR PROTEIN

; TITLE OF INVENTION: AND RELATED NUCLEIC ACID COMPOUNDS

; NUMBER OF SEQUENCES: 3

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Eli Lilly and Company

; STREET: Lilly Corporate Center

; CITY: Indianapolis

; STATE: Indiana

; COUNTRY: United States of America

; ZIP: 46285

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/337,797A

; FILING DATE: No. 6017697 September 14, 1994

; CLASSIFICATION: 514

; ATTORNEY/AGENT INFORMATION:

; NAME: Gaylo, Paul J.

; REGISTRATION NUMBER: 36,808

; REFERENCE/DOCKET NUMBER: X-9431

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (317) 276-0756

; TELEFAX: (317) 276-3861

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 2619 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: mRNA

; US-08-337-797A-3

; Query Match

; Best Local Similarity 52.6%; Score 27.6; DB 3; Length 2619;

; Matches 60; Conservative 0; Mismatches 54; Indels 0; Gaps 0;

OY 75 ATACAGTCTGCAAGCACTACAAACCTTGACCTGACTGTACGTCCTGGGTCCAA 134  
|||||  
Db 2430 AAAGAGGAGCAAGCAGCAGGAGCGCTGAGTACGACGACATGCTGTGTGT 2371

OY 135 TGTACCTGCTCCATTACAGTCTCCAAAGACAGACAGCA 188  
|||||  
Db 2370 CTGTACCGGTAGTACTGAGGTGACATAGAAAGATGGCAGAAATGCCAGCCA 2317

## RESULT 15

US-09-258-523-1/c

; Sequence 1, Application US/09258523

; Patent No. 6103475

; GENERAL INFORMATION:

; APPLICANT: Burnett, J. P.

; APPLICANT: Mayne, Nancy G.

; APPLICANT: Sharp, Robert L.

; APPLICANT: Snyder, Yvonne M.

; TITLE OF INVENTION: EXCITATORY AMINO ACID RECEPTOR PROTEIN

; TITLE OF INVENTION: AND RELATED NUCLEIC ACID COMPOUNDS

; NUMBER OF SEQUENCES: 3

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Eli Lilly and Company

; STREET: Lilly Corporate Center

; CITY: Indianapolis

; STATE: Indiana

; COUNTRY: United States of America

; ZIP: 46285

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/258,523

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/337,797

; FILING DATE: No. 6103475 September 14, 1994

; ATTORNEY/AGENT INFORMATION:

; NAME: Gaylo, Paul J.

; REGISTRATION NUMBER: 36,808

; REFERENCE/DOCKET NUMBER: X-9431

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (317) 276-0756

; TELEFAX: (317) 276-3861

; INFORMATION FOR SEQ ID NO: 1:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 2619 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 1..2616

; US-09-258-523-1

; Query Match

; Best Local Similarity 52.6%; Score 27.6; DB 3; Length 2619;

; Matches 60; Conservative 0; Mismatches 54; Indels 0; Gaps 0;

OY 75 ATACAGTCTGCAAGCACTACAAACCTTGACCTGACTGTACGTCCTGGGTCCAA 134  
|||||  
Db 2430 AAAGAGGAGCAAGCAGCAGGAGCGCTGAGTACGACGACATGCTGTGTGT 2371

OY 135 TGTACCTGCTCCATTACAGTCTCCAAAGACAGACAGCA 188  
|||||  
Db 2370 CTGTACCGGTAGTACTGAGGTGACATAGAAAGATGGCAGAAATGCCAGCCA 2317

Search completed: October 17, 2002, 11:14:37

Job time : 24.8822 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 : Search time 5.36485 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-11

Perfect score: 365  
Sequence: 1 GGCTTTGAGTGCACCAAAA.....AACAGGACACGACCAATTT 191

Scoring table:  
BLOSUM62  
Xgapop 10.0 , Ygapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 seqs, 24425594 residues  
Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+np2 model  
-O=/cgn2\_1/USPTO.spool/US09049666/runat\_16102002\_115821\_24739/app\_query.fasta\_1.13694  
-DB=Issued\_Patents\_AA -OPMT=fastan -SOFIX=rai -MINMATCH=0.1 -LOOPCL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi  
-LIST=45 -DOCALIGN=200 -THR\_SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=plto -NORM=ext -HEADSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-USER=US09049666\_ECGN\_1.1\_57\_etrunat\_16102002\_115821\_24739 -NCPU=6 -ICPU=3  
-NO\_XLPHY -NO\_MMAB -LARGEQUERY -NES\_SCORES=0 -WAIT -LONGLOG -DEV\_TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

Issued\_Patents\_AA:\*  
1: /cgn2\_6/plodata/2/1aa/5A.COMB.pep.\*  
2: /cgn2\_6/plodata/2/1aa/5B.COMB.pep.\*  
3: /cgn2\_6/plodata/2/1aa/6A.COMB.pep.\*  
4: /cgn2\_6/plodata/2/1aa/6B.COMB.pep.\*  
5: /cgn2\_6/plodata/2/1aa/PCFUS.COMB.pep.\*  
6: /cgn2\_6/plodata/2/1aa/backfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	315	86.3	914	4	US-09-193-562D-28
2	153	41.9	795	4	US-09-193-562D-11
3	153	41.9	821	4	US-09-193-562D-12
4	153	41.9	905	4	US-09-193-562D-2
5	151	41.4	903	4	US-09-193-562D-46
6	121.5	33.3	943	4	US-09-193-562D-32
7	115.5	31.6	1000	4	US-09-193-562D-30
8	115	31.5	902	4	US-09-193-562D-34
9	66	18.1	252	2	US-08-414-657D-56
10	66	18.1	252	2	US-08-414-657D-57
11	66	18.1	287	2	US-08-414-657D-48
12	66	18.1	287	2	US-08-414-657D-49

13	66	18.1	304	2	US-08-414-657D-44	Sequence 44, Appl
14	66	18.1	308	2	US-08-414-657D-46	Sequence 46, Appl
15	66	18.1	310	2	US-08-414-657D-45	Sequence 45, Appl
16	66	18.1	315	2	US-08-414-657D-47	Sequence 47, Appl
17	66	18.1	325	2	US-08-414-657D-2	Sequence 2, Appl1
18	66	18.1	325	2	US-08-414-657D-41	Sequence 41, Appl
19	66	18.1	338	2	US-08-414-657D-42	Sequence 42, Appl
20	66	18.1	338	2	US-08-414-657D-43	Sequence 43, Appl
21	66	18.1	338	2	US-08-414-657D-60	Sequence 60, Appl
22	63	17.3	349	3	US-09-009-620-2	Sequence 2, Appl1
23	63	17.3	1375	4	US-09-210-361-4	Sequence 4, Appl1
24	62.5	17.1	470	3	US-09-118-319-8	Sequence 8, Appl1
25	59	16.2	117	4	US-08-525-539A-78	Sequence 78, Appl
26	59	16.2	136	4	US-08-525-539A-63	Sequence 63, Appl
27	59	16.2	774	4	US-09-276-400-7	Sequence 7, Appl1
28	59	16.2	774	4	US-09-448-076-7	Sequence 7, Appl1
29	58.5	16.0	1024	4	US-09-091-117-5	Sequence 5, Appl1
30	58	15.9	333	2	US-08-853-659A-48	Sequence 48, Appl
31	57.5	15.8	235	3	US-08-444-644-19	Sequence 19, Appl
32	57.5	15.8	235	4	US-08-232-246A-19	Sequence 19, Appl
33	57.5	15.8	241	1	US-08-235-838-11	Sequence 11, Appl
34	57.5	15.8	241	2	US-08-465-473B-11	Sequence 11, Appl
35	57.5	15.8	637	1	US-08-235-838-16	Sequence 16, Appl
36	57.5	15.8	637	2	US-08-465-473B-16	Sequence 16, Appl
37	57	15.6	457	3	US-09-142-759-1	Sequence 1, Appl1
38	56.5	15.5	357	1	US-08-078-683A-8	Sequence 8, Appl1
39	56	15.3	168	1	US-08-460-739-5	Sequence 5, Appl1
40	56	15.3	216	3	US-08-928-361B-8	Sequence 8, Appl1
41	56	15.3	666	4	US-08-982-785A-11	Sequence 11, Appl
42	56	15.3	707	2	US-08-949-941B-2	Sequence 2, Appl1
43	56	15.3	1837	3	US-08-928-361B-5	Sequence 5, Appl
44	55.5	15.2	398	2	US-08-853-659A-45	Sequence 45, Appl
45	55	15.1	278	5	PCT-US94-03744-2	Sequence 2, Appl1

#### ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
Sequence 28, Application US/09193562D  
Patent No. 6309857

GENERAL INFORMATION:  
APPLICANT: Pauli, Benedict U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 1617.0052  
CURRENT FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/09/193.562D  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 28  
LENGTH: 914  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-193-562D-28

#### Alignment Scores:

Pred. No.: 5.77e-34 Length: 914  
Score: 315.00 Matches: 63  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 86.30% Indels: 0  
DB: 4 Gaps: 0

US-09-049-696-11 (1-191) x US-09-193-562D-28 (1-914)

QY 1 GGCTTTGAGTGCACCAAAAACACCAAAATGGCTTACTCCAAATCCAGCATTCGTAAG 60  
DB 541 GlyPheValValAspLysAsnThrLysMetAlaTyrLeuGlnIleProGlyIleAlaLys 560  
QY 61 GTTGACATTTGGAATACAGTCTGCAAGCAAGTCCACAAACCTTGACCTGCTGTCAGC 120  
|||||

```

Db 561 ValGlyThrTrpLysTyrSerLeuGlnAlaSerSerGlnThrLeuThrValThr 580
QY 121 TCCCGTGCCTCCATGCTTCCTGCTCCATTTACAGTACTTCCAAAAGCAAGGAC 180
Db 581 SerArgLaserAsnAlaThrLeuProProlThrValThrSerLysThrAsp 600
QY 181 ACCAGCAA 189
Db 601 ThrSerLys 603

RESULT 2
US-09-193-562D-11
; Sequence 11, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 11
; LENGTH: 795
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

```

```

Alignment Scores:
Pred. No.: 2,71e-12 Length: 795
Score: 153.00 Matches: 34
Percent Similarity: 69.23% Conservative: 11
Best Local Similarity: 52.31% Mismatches: 16
Query Match: 41.92% Indels: 4
Gaps: 2

```

```
US-09-049-696-11 (1-191) x US-09-193-562D-11 (1-795)
```

```

QY 4 TTTGTAGTGACAA--AACACCAAAATGGCTTACCTCCAAATCCAGGACATTGCTAAG 60
Db 546 PhelysGluAspLysLeuAsnAlaArgSerAlaArgLeuGlnIleProGlyIleAlaGlu 565
QY 61 GTTGGCACTTGGAATACAGTCTG-----CAAGCAAGCTCACAAACCTTGACCTG 111
Db 566 ThrGlyThrTrpThrTyrSerLeuLeuAsnAlaSerSerGlnMetLeuThrVal 585
Db 112 ACTGTACAGTCCCGTGCCTCCATGCTACCTCCCAATTTACAGTACGACTTCCAAAAGC 171
Db 586 ThrValThrThrAlaArgSerProThrIleProProValIleAlaThrAlaHisMet 605
QY 172 AACAGGACACACGAC 186
Db 606 SerGlnHisThrAla 610

RESULT 3
US-09-193-562D-12
; Sequence 12, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 12

```

```

; LENGTH: 821
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-12

```

```

Alignment Scores:
Pred. No.: 2,73e-12 Length: 821
Score: 153.00 Matches: 34
Percent Similarity: 69.23% Conservative: 11
Best Local Similarity: 52.31% Mismatches: 16
Query Match: 41.92% Indels: 4
Gaps: 2

```

```
US-09-049-696-11 (1-191) x US-09-193-562D-12 (1-821)
```

```

QY 4 TTTGTAGTGACAA--AACACCAAAATGGCTTACCTCCAAATCCAGGACATTGCTAAG 60
Db 546 PhelysGluAspLysLeuAsnAlaArgSerAlaArgLeuGlnIleProGlyIleAlaGlu 565
QY 61 GTTGGCACTTGGAATACAGTCTG-----CAAGCAAGCTCACAAACCTTGACCTG 111
Db 566 ThrGlyThrTrpThrTyrSerLeuLeuAsnAlaSerSerGlnMetLeuThrVal 585
QY 112 ACTGTACAGTCCCGTGCCTCCATGCTACCTCCCAATTTACAGTACGACTTCCAAAAGC 171
Db 586 ThrValThrThrAlaArgSerProThrIleProProValIleAlaThrAlaHisMet 605
QY 172 AACAGGACACACGAC 186
Db 606 SerGlnHisThrAla 610

```

```

RESULT 4
US-09-193-562D-2
; Sequence 2, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 2
; LENGTH: 905
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells
US-09-193-562D-2

```

```

Alignment Scores:
Pred. No.: 2,8e-12 Length: 905
Score: 153.00 Matches: 34
Percent Similarity: 69.23% Conservative: 11
Best Local Similarity: 52.31% Mismatches: 16
Query Match: 41.92% Indels: 4
Gaps: 2

```

```
US-09-049-696-11 (1-191) x US-09-193-562D-2 (1-905)
```

```

QY 4 TTTGTAGTGACAA--AACACCAAAATGGCTTACCTCCAAATCCAGGACATTGCTAAG 60
Db 546 PhelysGluAspLysLeuAsnAlaArgSerAlaArgLeuGlnIleProGlyIleAlaGlu 565
QY 61 GTTGGCACTTGGAATACAGTCTG-----CAAGCAAGCTCACAAACCTTGACCTG 111
Db 566 ThrGlyThrTrpThrTyrSerLeuLeuAsnAlaSerSerGlnMetLeuThrVal 585

```

```

      LENGTH: 943
      TYPE: PRT
      ORGANISM: Homo sapiens
US-09-193-562D-32

Alignment Scores:
Pred. No.:          4.66e-08          length:          943
Score:             121.50             Matches:          28
Percent Similarity: 58.73%             Conservative:    9
Best Local Similarity: 44.44%           Mismatches:     23
Query Match:       33.29%              Indels:         3
DB:                4                  Caps:           1

US-09-049-696-11 (1-191) x US-09-193-562D-32 (1-943)
QY      4      TTTGTAGTGACAAAACACCAAAATGGCTACTCCAAATCCAGGACGTCTTAAGCTT      63
           |||      ::      ::      |||      |||      |||      |||      |||
Db      553    PheThrThrAsnLeuThrPheArgThrAlaSerLeuTrpIleProGlyThrAlaLysPro      572
QY      64      GGCAGCTGGAAATACAGTCGCTG-----CAAGCAGGTCGCAACAACTTGACCCGTCAGT      114
           |||      |||      |||      |||      |||      |||      |||      |||
Db      573    GlyHisTrpPheTrpThrLeuAsnAsnThrHisHisSerLeuGlnAlaLeuLysValThr      592
QY      115     GTCACGTCCCGCTGGTCCAATGCTACCCCTGCCTCCAAATTACAGTGACTTCCAAAACGAC      174
           |||      |||      |||      |||      |||      |||      |||      |||
Db      593    ValThrSerArgAlaSerAsnSerAlaValProProAlaThrValGluAlaPheValGlu      612
QY      175     AAGGACAC      183
           ::|      |||      ::
Db      613    ArgAspSer      615

```

```

US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIORITY FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 30
; LENGTH: 1000
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-193-562D-30

Alignment Scores:
Pred. No.:      3e-07      Length:      1000
Score:          115.50     Matches:    24
Percent Similarity: 66.10%   Conservative: 15
Best Local Similarity: 40.68% Mismatches:  17
Query Match:     31.64%     Indels:     3
DB:              4         Gaps:         1

US-09-049-696-11 (1-191) x US-09-193-562D-30 (1-1000)

OY      19 AACACCAAAATGGCCCTACGTCACCAATGCCAGCATTCGTAAAGTTGGCATTGGGAATAC 78
       ||| ::: ||| ||:::||||| |||||::: || || |
Db      570 ASnllrgrserAlAaArgleuAngIleProGIyIlelaelutHrgIlyIleTPrThrTy 569
OY      79 AGTCGCAA-----GCAAGCTACAACAACCTTGACCCTGCATGTACAGTCCCGTGGC 129
       |||:::||||| ||||| |||||::|||::|::|::|::|::|::|::|::|::|::|::|
Db      590 SerValArgrsaNsAsnHstHlySserGIleuleuThrValrHmetetHrArgAla 609
OY      130 TCCAATGCTACCCGCTCCCAATTAACGTACTTCCAAAACGAAGAAGCACACCAG 186
       :::: ||| ||:::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|
Db      610 ArgSerProHrThrIleuProValIlealrHthrAlaHisSerMetGrInasnrHraLa 628

```

RESULT 8  
US-09-193-562D-34  
; Sequence 34, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Paul, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 34  
; LENGTH: 902  
; TYPE: PRT  
; ORGANISM: Mus musculus  
US-09-193-562D-34  
Alignment Scores:  
; Seq. No.: 3,41e-07 Length: 902  
; Score: 115.00 Matches: 26  
; Percent Similarity: 67.31% Conservative: 9  
; Best Local Similarity: 50.00% Mismatches: 15  
; Query Match: 31.51% Indels: 2  
; Gaps: 2  
US-09-049-696-11 (1-191) x US-09-193-562D-34 (1-902)  
QY 4 TTGTGATGACAAA---AACACCAAAATGGCTTACCTCCAAATCCAGCATGCTAG 60  
DB 545 PNEGILASPSPSYLSUHSNLIETARGSERALARGLEGLNLERPROGLYTHRALAGLU 564  
QY 61 GTTGGACTTGCAAAACGCTGTCGACAGCAAGC---TCACAAACCTTGACCGCATGTC 117  
DB 565 THTGTYTHTTTPHTYRTHYRISERTYRTHGLYTHRSERGLNLEUHTHMETHTVAL 584  
QY 118 ACGTCCCGTCGTCACCAATGTCACCTGCTCCCAATT 153  
DB 585 THTHTARGALARGSERPROTHMETGLUPTOLEU 596  
RESULT 9  
US-08-414-657D-56  
; Sequence 56, Application US/08414657D  
; Patent No. 5861283  
; GENERAL INFORMATION:  
; APPLICANT: Levitt, Pat  
; APPLICANT: Pimenta, Aurea  
; APPLICANT: Fischer, Itzhak  
; APPLICANT: Zhukareva, Victoria  
; TITLE OF INVENTION: Limbic System-Associated Membrane  
; TITLE OF INVENTION: Protein and DNA  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Dechert Price & Rhoads  
; STREET: 997 Lenox Drive, Building 3, Suite 210  
; CITY: Lawrenceville  
; STATE: NJ  
; COUNTRY: USA  
; ZIP: 08543  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/414,657D  
; FILING DATE: 31-MAR-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:

ATTORNEY/AGENT INFORMATION:  
; NAME: Bloom, Allen  
; REGISTRATION NUMBER: 29,135  
; REFERENCE/DOCKET NUMBER: 317743-102  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 609-520-3214  
; TELEFAX: 609-520-3259  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 56:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 252 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
US-08-414-657D-56  
Alignment Scores:  
; Pred. No.: 0.897 Length: 252  
; Score: 66.00 Matches: 15  
; Percent Similarity: 50.98% Conservative: 11  
; Best Local Similarity: 29.41% Mismatches: 25  
; Query Match: 18.08% Indels: 0  
; Gaps: 0  
US-09-049-696-11 (1-191) x US-08-414-657D-56 (1-252)  
QY 34 TACCTCCAAATCCAGCATGCTTGTCTAAGTTGGCATGGAATACAGTGCAGCAGC 93  
DB 136 TYTLEGLNLTLEUGLYLTHRTARGLUGLNSERGlySTYGLUCYSYSLALAA 155  
QY 94 TCACAAACCTTGACCTGACTGTACAGTCGCTGCTCCAAATGCTACCTCCCAATT 153  
DB 156 ASGLUVALISERSEALASPVALYLSGLNVALYLSVALTHVALASNTRYRPROBTHR 175  
QY 154 ACAGTACTTCCAAACGACAGCAAGCACCAGC 186  
DB 176 ILEHGLUSERTYLSERASGLUALATHR 186  
RESULT 10  
US-08-414-657D-57  
; Sequence 57, Application US/08414657D  
; Patent No. 5861283  
; GENERAL INFORMATION:  
; APPLICANT: Levitt, Pat  
; APPLICANT: Pimenta, Aurea  
; APPLICANT: Fischer, Itzhak  
; APPLICANT: Zhukareva, Victoria  
; TITLE OF INVENTION: Limbic System-Associated Membrane  
; TITLE OF INVENTION: Protein and DNA  
; NUMBER OF SEQUENCES: 60  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Dechert Price & Rhoads  
; STREET: 997 Lenox Drive, Building 3, Suite 210  
; CITY: Lawrenceville  
; STATE: NJ  
; COUNTRY: USA  
; ZIP: 08543  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ for Windows Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/414,657D  
; FILING DATE: 31-MAR-1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Bloom, Allen  
; REGISTRATION NUMBER: 29,135  
; REFERENCE/DOCKET NUMBER: 317743-102



```

1      INFORMATION FOR SEQ ID NO: 48:
2      SEQUENCE CHARACTERISTICS:
3          LENGTH: 287 amino acids
4          TYPE: amino acid
5          STRANDEDNESS: single
6          TOPOLOGY: linear
7      US-08-414-657D-48
8
9      Alignment Scores:
10         Pred. NO.:           0.927             Length: 287
11         Percent:            66.00              Matches: 15
12         Score Similarity:   50.98%             Conservative: 11
13         Best Local Similarity: 29.41%          Mismatches: 25
14         Query Match:       18.08%             Indels: 0
15                                         Gaps: 0
16
17      US-09-049-696-11 (1-191) x US-08-414-657D-48 (1-287)
18
19      Oy      34  TACCTCCCAATCCCAGGATGTGTAAGTTGGCACTTGGAAATCAGTCTGCAGACAGC 93
20                |||||||::|| | ||||| :::: ||||||| :|||::|
21      Db      153  TYRLEUGLUILELGLYILETHRAARGLUGLSINSERLYSTRYGIUCYSLYSALAIA 172
22                :::: :::: ||||
23      Oy      94  TCACAACACTTGACCGTCACGTCACGCGCGTCGCCAATGCTACCCTGCCCATTT 153
24                :::: :::: ||||
25      Db      173  ASNGUVALISERSERIALASPVALLYSLINVALYTHRVALASNTYRPROPTTHR 192
26                :::: :::: ||||
27      Oy      154  ACAGTGACTTCCAAAAGCAGACAGACAGCACAGC 186
28                |||||||::|||::|
29      Db      193  ILETHRGUSERLYSSERASNGUALATHRTHR 203
30
31      RESULT 12
32      US-08-414-657D-49
33      / Sequence 49, Application US/08414657D
34      / Patent No. 5861283
35      / GENERAL INFORMATION:
36          APPLICANT: Levitt, Pat
37          APPLICANT: Pimenta, Aurea
38          APPLICANT: Fischer, Itzhak
39          APPLICANT: Zhukareva, Victoria
40          TITLE OF INVENTION: Limbic System-Associated Membrane
41          TITLE OF INVENTION: Protein and DNA
42          NUMBER OF SEQUENCES: 60
43          CORRESPONDENCE ADDRESS:
44              ADDRESSEE: Dechert Price & Rhoads
45              STREET: 997 Lenox Drive, Building 3, Suite 210
46              CITY: Lawrenceville
47              STATE: NJ
48              COUNTRY: USA
49              ZIP: 08543
50      COMPUTER READABLE FORM:
51          MEDIUM TYPE: Diskette
52          COMPUTER: IBM Compatible
53          OPERATING SYSTEM: DOS
54          SOFTWARE: FastSeq for Windows Version 2.0
55      CURRENT APPLICATION DATA:
56          APPLICATION NUMBER: US/08/414,657D
57          FILING DATE: 31-MAR-1995
58          CLASSIFICATION: 435
59          PRIOR APPLICATION DATA:
60              APPLICATION NUMBER:
61              FILING DATE:
62      ATTORNEY/AGENT INFORMATION:
63          NAME: Bloom, Allen
64          REGISTRATION NUMBER: 29,135
65          REFERENCE/DOCKET NUMBER: 317743-102
66      TELECOMMUNICATION INFORMATION:
67          TELEPHONE: 609-520-3214
68          TELEFAX: 609-520-3259
69      TELEX:
70      INFORMATION FOR SEQ ID NO: 49:
71      SEQUENCE CHARACTERISTICS:
72          LENGTH: 287 amino acids
73          TYPE: amino acid

```



Best Local Similarity: 29.41% Mismatches: 25  
Query Match: 18.08% Indels: 0  
DB: 2 Gaps: 0  
US-09-049-696-11 (1-191) x US-08-414-657D-46 (1-308)  
QY 34 TACCTCAAAATCCAGGATTCCTAAGTTGGCACTTGAATACAGTCTGCAAGCAGC 93  
DB 174 Tyrrleugluilleuenglyllerhrargluginserglyltyrclucysylsalaia 193  
QY 94 TCACAACTTGACCTGACTGTACAGTCCCGTCCGTCCTCAATGCTACCTGCTCAATT 153  
DB 194 AsngluvalserSerAlaaspvallysglnvallylthvalasntyrprothrothr 213  
QY 154 ACAGTACTTCCAAAGCAGACAGCAGCAGC 186  
DB 214 llerhrgluserlyssersnglnalathrrthr 224  
SULT 15  
US-08-414-657D-45  
Sequence 45, Application US/08414657D  
Patent No. 5861283  
GENERAL INFORMATION:  
APPLICANT: Levitt, Pat  
APPLICANT: Pimenta, Aurea  
APPLICANT: Fischer, Itzhak  
APPLICANT: Zhukareva, Victoria  
TITLE OF INVENTION: Limbic System-Associated Membrane  
TITLE OF INVENTION: Protein and DNA  
NUMBER OF SEQUENCES: 60  
CORRESPONDENCE ADDRESS:  
ADDRESS: Dechert Price & Rhoads  
STREET: 997 Lenox Drive, Building 3, Suite 210  
CITY: Lawrenceville  
STATE: NJ  
COUNTRY: USA  
ZIP: 08543  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/414,657D  
FILING DATE: 31-MAR-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bloom, Allen  
REGISTRATION NUMBER: 29,135  
REFERENCE/DOCKET NUMBER: 317743-102  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 609-520-3214  
TELEFAX: 609-520-3259  
TELEX:  
INFORMATION FOR SEQ ID NO: 45:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 310 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-414-657D-45  
Alignment Scores:  
Pred. NO.: 0.945 Length: 310  
Score: 66.00 Matches: 15  
Percent Similarity: 50.98% Conservative: 11  
Best Local Similarity: 29.41% Mismatches: 25  
Query Match: 18.08% Indels: 0  
DB: 2 Gaps: 0

US-09-049-696-11 (1-191) x US-08-414-657D-45 (1-310)  
QY 34 TACCTCAAAATCCAGGATTCCTAAGTTGGCACTTGAATACAGTCTGCAAGCAGC 93  
DB 153 Tyrrleugluilleuenglyllerhrargluginserglyltyrclucysylsalaia 172  
QY 94 TCACAACTTGACCTGACTGTACAGTCCCGTCCGTCCTCAATGCTACCTGCTCAATT 153  
DB 173 AsngluvalserSerAlaaspvallysglnvallylthvalasntyrprothrothr 192  
QY 154 ACAGTACTTCCAAAGCAGACAGCAGCAGC 186  
DB 193 llerhrgluserlyssersnglnalathrrthr 203  
Search completed: October 17, 2002, 17:59:34  
Job time : 7.36485 secs

*This Page Blank (uspto)*



Sequence 14, Application US/08804439A  
Patent No. 6015565  
GENERAL INFORMATION:  
APPLICANT: Rose, Timothy M.  
APPLICANT: Bosch, Marix L.  
TITLE OF INVENTION: GLYCOPROTEIN B OF THE RHHV/KSHV  
TITLE OF INVENTION: SUBFAMILY OF HERPES VIRUSES  
NUMBER OF SEQUENCES: 113  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 4225 Executive Square, Ste 1400  
CITY: La Jolla  
STATE: CA  
COUNTRY: USA  
ZIP: 92037  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/804,439A  
FILING DATE: February 21, 1997  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Halle, Lisa A.  
REGISTRATION NUMBER: 38,347  
REFERENCE/DOCKET NUMBER: 09176/004001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 678-5070  
TELEFAX: (619) 678-5099  
TELEX:  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 808 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-804-439A-14

Alignment Scores:  
Pred. No.: 3.95 Length: 808  
Score: 50.50 Matches: 15  
Percent Similarity: 50.00% Conservative: 3  
Best Local Similarity: 41.67% Mismatches: 9  
Query Match: 27.90% Indels: 9  
DB: 3 Gaps: 2

US-09-049-696-17 (1-106) x US-08-804-439A-14 (1-808)

9 CATTTTAAATATGATGGAATGATGAGAACTGCAGCTGCATATAGC----- 59  
|||||  
Db 573 HispHelysAnlyrYValHisValGlu-----ThleuprovalAsnAsnIleSerThr 590  
|||||  
Qy 60 -----CTAGGGCTGAATTTTGTGCAGATAAATAAATAAT 95  
|||||  
Db 591 LeuAspThrPheLeuAlaLeuAsnLeuThrPheIleGluAsnIleAsp 606  
|||||

RESULT 3  
US-08-720-229-14  
Sequence 14, Application US/087202229  
Patent No. 6022542  
GENERAL INFORMATION:  
APPLICANT: Rose, Timothy M.  
APPLICANT: Bosch, Marix L.  
TITLE OF INVENTION: GLYCOPROTEIN B OF THE RHHV/KSHV  
TITLE OF INVENTION: SUBFAMILY OF HERPES VIRUSES  
NUMBER OF SEQUENCES: 100  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Morrison & Foerster

STREET: 755 Page Mill Road  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94304-1018  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/720, 229  
FILING DATE: 26-SEP-1996  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Schiff, J. Michael  
REGISTRATION NUMBER: 40,253  
REFERENCE/DOCKET NUMBER: 29938-20002.00  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 813-5600  
TELEFAX: (415) 494-0792  
TELEX: 706141  
INFORMATION FOR SEQ ID NO: 14:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 808 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-720-229-14

Alignment Scores:  
Pred. No.: 3.95 Length: 808  
Score: 50.50 Matches: 15  
Percent Similarity: 50.00% Conservative: 3  
Best Local Similarity: 41.67% Mismatches: 9  
Query Match: 27.90% Indels: 9  
DB: 3 Gaps: 2

US-09-049-696-17 (1-106) x US-08-720-229-14 (1-808)

9 CATTTTAAATATGATGGAATGATGAGAACTGCAGCTGCATATAGC----- 59  
|||||  
Db 573 HispHelysAnlyrYValHisValGlu-----ThleuprovalAsnAsnIleSerThr 590  
|||||  
Qy 60 -----CTAGGGCTGAATTTTGTGCAGATAAATAAATAAT 95  
|||||  
Db 591 LeuAspThrPheLeuAlaLeuAsnLeuThrPheIleGluAsnIleAsp 606  
|||||

RESULT 4  
US-08-468-576B-12  
Sequence 12, Application US/08468576B  
Patent No. 595345  
GENERAL INFORMATION:  
APPLICANT: Rabin, Daniel  
TITLE OF INVENTION: PANCREATIC ISLET CELL ANTIGENS  
TITLE OF INVENTION: OBTAINED BY MOLECULAR CLONING  
NUMBER OF SEQUENCES: 19  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sprung Kramer Schaefer & Briscoe  
STREET: 660 White Plains Road  
CITY: Tarrytown  
STATE: New York  
COUNTRY: USA  
ZIP: 10591-5144  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 MB storage  
COMPUTER: Apple Macintosh  
OPERATING SYSTEM: System 7.5  
SOFTWARE: WordPerfect  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/468, 576B  
FILING DATE: 06-JUN-1995

```

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/239,276
FILING DATE: 05-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/872,646
FILING DATE: 08-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/715,181
FILING DATE: 14-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/441,703
FILING DATE: 04-DEC-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/312,543
FILING DATE: 17-FEB-1989
ATTORNEY/AGENT INFORMATION:
NAME: Kurt G. Briscoe
REGISTRATION NUMBER: 33,141
REFERENCE/DOCKET NUMBER: MDI 251.7-KGB
TELECOMMUNICATION INFORMATION:
TELEPHONE: (914) 332-1700
TELEFAX: (914) 332-1844
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 604 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-468-576B-12

Alignment Scores:
Pred. No.: 6.6 Length: 604
Score: 49.00 Matches: 8
Percent Similarity: 75.00% Conservative: 7
Best Local Similarity: 40.00% Mismatches: 5
Query Match: 27.07% Indels: 0
DB: 2 Gaps: 0

US-09-049-696-17 (1-106) x US-08-468-576B-12 (1-604)
OY 30 GTGATAGAGAACTGCAGCTGTCATAGCCTAGCGCTGAATTTTGTGCAGTAATAATAA 89
||||| :: :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 522 VALSPGLYLSYSSERSETIIENASHMNCETLYEUNASNCYSLATGASNGULYLS 541

RESULT 5
US-08-468-579B-12
Sequence 12, Application US/08468579B
Patient No. 5981700
GENERAL INFORMATION:
APPLICANT: Rabin, Daniel
TITLE OF INVENTION: PANCREATIC ISLET CELL ANTIGENS
TITLE OF INVENTION: OBTAINED BY MOLECULAR CLONING
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sprung Kramer Schaefer & Briscoe
STREET: 660 White Plains Road
CITY: Tarrytown
STATE: New York
COUNTRY: USA
ZIP: 10591-5144
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage
OPERATING SYSTEM: System 7.5
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,579B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/239,276
FILING DATE: 05-MAY-1994
PRIOR APPLICATION DATA:

```

```

APPLICATION NUMBER: US 07/872,646
FILING DATE: 08-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/715,181
FILING DATE: 14-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/441,703
FILING DATE: 04-DEC-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/312,543
FILING DATE: 17-FEB-1989
ATTORNEY/AGENT INFORMATION:
NAME: Kurt G. Briscoe
REGISTRATION NUMBER: 33,141
REFERENCE/DOCKET NUMBER: MDI 251.5-KGB
TELECOMMUNICATION INFORMATION:
TELEPHONE: (914) 332-1700
TELEFAX: (914) 332-1844
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 604 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-468-579B-12

Alignment Scores:
Pred. No.:          6.6           Length:        604
Score:              49.00         Matches:       8
Percent Similarity: 75.00%        Conservative: 7
Best Local Similarity: 40.00%     Mismatches:   5
Query Match:        27.07%        Indels:       0
DB:                  2            Gaps:         0

US-09-049-696-17 (1-106) x US-08-468-579B-12 (1-604)

QY      30 GTGATAGAGAACTGCACGCTGTCAATAGCCTAGCGTGAATTTTGTCAGATAAATAAA 89
Db      522 ValaspglylsvlsrSerSertleasnasmwetylLeuansnserCysArgasngluLys 541

RESULT 6
US-08-468-577B-12
Sequence 12: Application US/08468577B
Patent No. 6001804
GENERAL INFORMATION:
APPLICANT: Rabin, Daniel
TITLE OF INVENTION: PANCEARTIC ISLET CELL ANTIGENS
TITLE OF INVENTION: OBTAINED BY MOLECULAR CLONING
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sprung Kramer Schaefer & Briscoe
STREET: 660 White Plains Road
City: Tarrytown
STATE: New York
COUNTRY: USA
ZIP: 10591-5144
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage
COMPUTER: Apple Macintosh
OPERATING SYSTEM: System 7.5
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,577B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/239,276
FILING DATE: 05-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/872,646
FILING DATE: 08-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/715,181
FILING DATE: 14-JUN-1991

```

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/441,703  
FILING DATE: 04-DEC-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/312,543  
FILING DATE: 17-FEB-1989  
ATTORNEY/AGENT INFORMATION:  
NAME: Kurt G. Briscoe  
REGISTRATION NUMBER: 33,141  
REFERENCE/DOCKET NUMBER: MDI 251.8-KGB  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (914) 332-1700  
TELEFAX: (914) 332-1844  
INFORMATION FOR SEQ ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 604 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
US-08-468-577B-12

Alignment Scores:  
Seq. No.: 6,6 Length: 604  
Percent Similarity: 49.00 Matches: 8  
Best Local Similarity: 75.00% Conservative: 7  
Query Match: 40.00% Mismatches: 5  
Indels: 0  
Gaps: 0

US-09-049-696-17 (1-106) x US-08-468-577B-12 (1-604)

QY 30 GTGATAGAGACTGCAGCTGTATAGCCCTGATTTTCTGCAGATAAATAA 89  
Db 522 ValaspGlyLysSerSerLeuAsnAsnMetIleuAsnSerCysArgAsnGluLys 541

RESULT 7  
US-08-742-440A-6  
Sequence 6, Application US/08742440A  
Patent No. 5892014  
GENERAL INFORMATION:  
APPLICANT: Coughlin, Shaun  
APPLICANT: Ishihari, Hiroaki  
APPLICANT: Connolly, Andrew  
TITLE OF INVENTION: Protease Activated Receptor  
TITLE OF INVENTION: 3 and Uses Thereof  
NUMBER OF SEQUENCES: 23  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Bozicevic & Reed, LLP  
STREET: 285 Hamilton Avenue, Suite 200  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/742,440A  
FILING DATE: 30-OCT-1996  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Sherwood, Pamela J  
REGISTRATION NUMBER: 36,677  
REFERENCE/DOCKET NUMBER: UCAL/060PAT  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-327-3400  
TELEFAX: 650 327-3231  
TELEX:  
INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:  
LENGTH: 408 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
FEATURE:  
US-08-742-440A-6

Alignment Scores:  
Pred. No.: 13.1 Length: 408  
Score: 47.00 Matches: 9  
Percent Similarity: 60.71% Conservative: 8  
Best Local Similarity: 32.14% Mismatches: 11  
Query Match: 26.11% Indels: 0  
Gaps: 0

US-09-049-696-17 (1-106) x US-08-742-440A-6 (1-408)

QY 95 ATTTATTTTATTTATTCGACAAATTCAGCCCTGATTCACAGCTGCTTCCT 36  
Db 355 LeuTyPheIleTyLeuIleAlaLeuCysIleuGlySerLeuAsnSerCysLeuAspPro 374

QY 35 ATCCACTTCACATATTTTAA 12  
Db 375 PheLeuTyPheLeuMetSerLys 382

RESULT 8  
US-08-878-474-3  
Sequence 3, Application US/08878474  
Patent No. 6133252  
GENERAL INFORMATION:  
APPLICANT: De Robertis, Edward M.  
APPLICANT: Boumeester, Tewis  
TITLE OF INVENTION: Endoderm, Cardiac and Neural Inducing  
TITLE OF INVENTION: Factors  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Majestic, Parsons, Siebert & Hsue  
STREET: Four Embarcadero Center, Suite 1100  
CITY: San Francisco  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 94111-4106  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC Compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/878,474  
FILING DATE: 18-JUN-1997  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/020,150  
FILING DATE: 20-JUN-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Siebert, J. Suzanne  
REGISTRATION NUMBER: 28,758  
REFERENCE/DOCKET NUMBER: 3100.002051  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415/248-5500  
TELEFAX: 415/362-5418  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 318 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-878-474-3

Alignment Scores:  
Pred. No.: 18.2 Length: 318  
Score: 46.00 Matches: 7



Db 351 LeuTyrPheMetTyrLeuIleAlaLeuCysLeuGlySerLeuAsnSerCysLeuAspPro 370

TITLE OF INVENTION: Pesticidal Toxins

```

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/844,188
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/633,993
FILING DATE: 19-APR-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sanders, Jay M.
REGISTRATION NUMBER: 39,355
REFERENCE NUMBER: MA-703C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 352-375-8100
TELEFAX: 352-372-5800
INFORMATION FOR SEO ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 276 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-844-188-15

Alignment Scores:
Pred. NO.:          26           Length:      276
Score:              45.00        Matches:     11
Percent Similarity: 58.62%       Conservative: 6
Best Local Similarity: 37.93%    Mismatches:  4
Query Match:        24.86%       Indels:      8
DB:                 Gaps:         2

US-09-049-696-17 (1-106) x US-08-844-188-15 (1-276)
QY   15 AAAAATTTT-----GTGGAAGTAGATGGAGACTGCAGCTCATAGC 59
      |||::|||            |||::|||::|||::|||::|||::|||::|||
Db   210 lyssertryalatyrglutrpglythrqlutleaspglnlysthrmlleleasnThr 22
QY   60 CTAGGCGTCGAATTTTGTGCAGTAATA 86
      |||||               |||||
Db   230 Leuglyphe-----Glnlleasn 235

RESULT 13
US-08-633-993A-13
; Sequence 13, Application US/08633993A
; Patent No. 6083499
; GENERAL INFORMATION:
; APPLICANT: Narva, Kenneth E.
; APPLICANT: Schepf, H. Ernest
; APPLICANT: Knuth, Mark
; APPLICANT: Pollard, Michael R.
; APPLICANT: Cardineau, Guy
; APPLICANT: Schwab, George E.
; TITLE OF INVENTION: Pesticidal Toxins
; NUMBER OF SEQUENCES: 33
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David R. Saliwanchik
; STREET: 2421 N.W. 41st Street, Suite A-1
; CITY: Gainesville
; STATE: FL
; COUNTRY: USA
; ZIP: 32606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/633,993A
; FILING DATE:

```

```
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Saliwanchik, David R.
REGISTRATION NUMBER: 31,794
REFERENCE/DOCKET NUMBER: MA703
TELECOMMUNICATION INFORMATION:
TELEPHONE: 904-375-8100
TELEFAX: 904-372-5800
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 278 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-633-993A-13

Alignment Scores:
Pred. No.: 26 Length: 278
Score: 45.00 Matches: 11
Percent Similarity: 58.62% Conservative: 6
Best Local Similarity: 37.93% Mismatches: 4
Query Match: 24.86% Indels: 8
DB: 3 Gaps: 2

US-09-049-696-17 (1-106) x US-08-633-993A-13 (1-278)

QY 15 AAAAATTAT-----GTGGAAGTGGATAGAGACTGCACCTGTCAATAGC 59
      |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 212 lysseTYTThrTgltuTpelplyThrgluIleaspGlnlystThrIleIleasnThr 231
      |||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 60 CTAGGCGTGAATTTTGTGCATTAAT 86
      |||:|||||:|||||:|||||:|||||:|||||:
Db 232 LeuGlyPhe-----GlnIleasn 237
      |||:|||||:|||||:|||||:|||||:|||||:

RESULT 14
US-08-844-188-13
Sequence 13, Application US/08844188
Patent No. 6127180
GENERAL INFORMATION:
APPLICANT: Narva, Kenneth E.
APPLICANT: Schnepf, H. Ernest
APPLICANT: Knuth, Mark
APPLICANT: Pollard, Michael R.
APPLICANT: Cardineau, Guy
TITLE OF INVENTION: Pesticidal toxins
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
ADDRESS: Saliwanchik, Lloyd & Saliwanchik
STREET: 2421 N.W. 41st Street, Suite A-1
CITY: Gainesville
STATE: FL
COUNTRY: USA
ZIP: 32606-6669
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/844,188
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/633,993
FILING DATE: 19-APR-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sanders, Jay M.
REGISTRATION NUMBER: 39,355
REFERENCE/DOCKET NUMBER: MA-703C1
TELECOMMUNICATION INFORMATION:
```

```
TELEPHONE: 352-375-8100
TELEFAX: 352-372-5800
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 278 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-844-188-13

Alignment Scores:
Pred. No.: 26 Length: 278
Score: 45.00 Matches: 11
Percent Similarity: 58.62% Conservative: 6
Best Local Similarity: 37.93% Mismatches: 4
Query Match: 24.86% Indels: 8
DB: 3 Gaps: 2

US-09-049-696-17 (1-106) x US-08-844-188-13 (1-278)

QY 15 AAAAATTAT-----GTGGAAGTGGATAGAGACTGCACCTGTCAATAGC 59
      |||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 212 lysseTYTThrTgltuTpelplyThrgluIleaspGlnlystThrIleIleasnThr 231
      |||:|||||:|||||:|||||:|||||:|||||:|||||:
QY 60 CTAGGCGTGAATTTTGTGCATTAAT 86
      |||:|||||:|||||:|||||:|||||:|||||:
Db 232 LeuGlyPhe-----GlnIleasn 237
      |||:|||||:|||||:|||||:|||||:|||||:

RESULT 15
US-08-466-343D-9
Sequence 9, Application US/08466343D
Patent No. 6025154
GENERAL INFORMATION:
APPLICANT: IL, YI
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING HUMAN G-PROTEIN
TITLE OF INVENTION: CHEMOKINE RECEPTOR HDGMR10 (AS AMENDED)
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESS: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
STREET: 1100 NEW YORK AVE., NW, SUITE 600
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,343D
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.1150000/EKS/KLM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 371-2600
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 344 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-466-343D-9

Alignment Scores:
Pred. No.: 27.1 Length: 344
Score: 45.00 Matches: 9
```

Percent Similarity: 58.62% Conservative: 8  
 Best Local Similarity: 31.03% Mismatches: 12  
 Query Match: 24.86% Indels: 0  
 DB: 3 Gaps: 0

US-09-049-696-17 (1-106) x US-08-466-343D-9 (1-344)

QY 6 TCACATTTTAAATAATTATGTGGAAGTGAAGAGAACTGCAGCTGTCAATAGCCTTAGGG 65  
 |||::: ::::: |||  
 Db 258 SerAsnCysGlnSerThrSerGlnLeuAspGlnAlaThrGlnValThrGlnThrLeuGly 277  
 QY 66 CTGAATTTTGTCAGATAATAATAA 92  
 ::: ||| ||||| |||  
 Db 278 MetThrHisCysCysIleAsnProIle 286

Search completed: October 17, 2002, 17:59:43  
 Job time : 4.97735 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 : Search time 8.71992 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-16

Perfect score: 242  
Sequence: 1 GTTATTCCTCCACAGACTC.....ATGTTATTTAGACTTCTGT 242

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Archived: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_NA: \*  
1: /cgn2\_6/ptodata/2/ina/5A.COMB.seq: \*  
2: /cgn2\_6/ptodata/2/ina/5B.COMB.seq: \*  
3: /cgn2\_6/ptodata/2/ina/6A.COMB.seq: \*  
4: /cgn2\_6/ptodata/2/ina/6B.COMB.seq: \*  
5: /cgn2\_6/ptodata/2/ina/PTCUS.COMB.seq: \*  
6: /cgn2\_6/ptodata/2/ina/Backfile1.seq: \*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	228.8	98.7	3007	4	US-09-193-562D-27
2	166.8	68.9	878	1	US-08-469-667-8
3	166.8	68.9	878	4	US-09-224-110-8
4	166.8	68.9	878	5	PCT-US95-07289-8
5	33.8	14.0	805	1	US-08-118-469A-6
6	33.8	14.0	805	1	US-08-909-119-6
7	33.2	13.7	2520	2	US-08-454-557C-50
8	33.2	13.7	2520	2	US-08-340-426D-50
9	33.2	13.7	2520	2	US-08-450-673C-50
10	33.2	13.7	2520	5	PCT-US95-17111A-50
11	33.2	13.7	10684	3	US-08-618-100B-3
12	32.6	13.5	19124	2	US-08-487-826B-13
13	31.6	13.1	6519	1	US-08-233-008A-7
14	30.6	12.6	639	4	US-09-328-111-731
15	30.6	12.6	2018	4	US-08-714-918-16
16	30.6	12.6	2018	4	US-09-265-315-16
17	30.6	12.6	2018	4	US-09-265-315-16
18	30.6	12.6	2018	4	US-09-265-315-16
19	30.6	12.6	2187	2	US-08-679-635A-1
20	30.6	12.6	4248	3	US-08-678-614-1
21	30.4	12.6	1395	1	US-07-991-867B-25
22	30.4	12.6	1395	1	US-08-107-755A-25
23	30.4	12.6	1395	2	US-08-544-332-25
24	30.4	12.6	5433	3	US-08-929-329-1
25	30.4	12.6	6768	1	US-08-107-755A-1
26	30.4	12.6	7488	3	US-08-475-886-3
27	30.4	12.6	8457	1	US-07-991-867B-1

28	30.4	12.6	8457	2	US-08-544-332-1	Sequence 1, Appl1
29	30.2	12.5	2757	1	US-08-599-252-90	Sequence 90, Appl1
30	30.2	12.5	2757	5	PCT-US96-06352-90	Sequence 90, Appl1
31	30.2	12.5	2757	5	PCT-US96-06583-90	Sequence 90, Appl1
32	30.2	12.5	7486	3	US-08-475-886-5	Sequence 5, Appl1
33	30.2	12.5	7486	3	US-08-397-232-3	Sequence 3, Appl1
34	30.2	12.5	7488	3	US-08-475-886-3	Sequence 3, Appl1
35	30	12.4	1185	2	US-08-179-557-14	Sequence 14, Appl1
36	30	12.4	4279	4	US-08-993-825-1	Sequence 1, Appl1
37	29.8	12.3	1415	1	US-08-413-118-127	Sequence 127, App
38	29.8	12.3	1415	3	US-08-473-446-127	Sequence 127, App
39	29.8	12.3	19124	2	US-08-487-826B-13	Sequence 13, Appl1
40	29.6	12.2	1221	1	US-08-445-090-1	Sequence 1, Appl1
41	29.6	12.2	1221	4	US-09-286-691-13	Sequence 13, Appl1
42	29.6	12.2	1221	4	US-09-687-147-13	Sequence 13, Appl1
43	29.6	12.2	7521	4	US-09-004-838-116	Sequence 116, App
44	29.6	12.2	10815	4	US-09-004-838-21	Sequence 21, Appl1
45	29.6	12.2	13149	4	US-09-004-838-87	Sequence 87, Appl1

## ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
; Sequence 27, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 27
; LENGTH: 3007
; TYPE: DNA
; ORGANISM: Homo sapiens
; ORGANISM: Homo sapiens
US-09-193-562D-27

Query Match      98.7% Score 238.8: DB 4: Length 3007;
Best Local Similarity 99.2%: Pred. No. 4.4e-58;
Matches 240; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GTTATTCCTCCACAGACTCCGCGAGAGACACTAGTCTGATGAAGCTCTGCTCTTG 60
    |||
DB 2638 GTTATTCCTCCACAGACTCCGCGAGAGACACTAGTCTGATGAAGCTCTGCTCTTG 2697

QY 61 TCTTATATTCATATCAACAGACCAATTCCTGGCATTCACATTTTAAATTAATGTCGAA 120
    |||
DB 2638 TCTTATATTCATATCAACAGACCAATTCCTGGCATTCATTTTAAATTAATGTCGAA 2757

QY 121 GCGATAGAGAGACGACGCTGCAATAGCCCTAGGCGTGAATTTTTCGACATTAATAA 180
    |||
DB 2758 GCGATAGAGAGACGACGCTGCAATAGCCCTAGGCGTGAATTTTTCGACATTAATAA 2817

QY 181 ATTAATTCATTCCTTTTGTGATTAATAATTTTCAAAATGTAATTTTGAATCTCT 240
    |||
DB 2818 ATTAATTCATTCCTTTTGTGATTAATAATTTTCAAAATGTAATTTTGAATCTCT 2877

QY 241 GT 242
    ||
DB 2878 GT 2879

RESULT 2
US-08-469-667-8
; Sequence 8, Application US/08469667
; Patent No. 5733748
; GENERAL INFORMATION:
```

```

: APPLICANT: Yu, Guo-Liang
: APPLICANT: Rosen, Craig
: TITLE OF INVENTION: Colon Specific Genes and Proteins
: NUMBER OF SEQUENCES: 24
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,
: ADDRESSEE: Stewart & Olstein
: STREET: 6 Becker Farm Road
: CITY: Roseland
: STATE: NJ
: COUNTRY: USA
: ZIP: 07068-1739
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: IBM PC compatible
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/469,667
: FILING DATE: 06-JUN-1995
: CLASSIFICATION: 536
: ATTORNEY/AGENT INFORMATION:
: NAME: Ferraro, Gregory D.
: REGISTRATION NUMBER: 36,134
: REFERENCE/DOCKET NUMBER: 325800-435
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 201-994-1700
: TELEFAX: 201-994-1744
: INFORMATION FOR SEQ ID NO: 8:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 878 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: cDNA
: FEATURE:
: NAME/KEY: CDS
: LOCATION: 2..685
: US-08-469-667-8

```

```

Query Match      68.9%; Score 166.8; DB 1; Length 878;
Best Local Similarity 91.6%; Pred. No. 4.5e-38;
Matches 196; Conservative 1; Mismatches 15; Indels 2; Gaps 2;

```

```

QY 1 GTTATTCCTCCACAGACTCCGCCAGACACCTAGTCCATGAAGCGTGTCTCTTG 60
DB 625 GTTATTCCTCCACAGACTCCGCCAGACACCTAGTCCATGAAGCGTGTCTCTTG 684
QY 61 T-CCTAATATTCATATCAACAGACACCATTCCTGGCATTACATTTTAAATAATATGTGA 119
DB 685 TCCCTAATATTCATATCAACAGACACCATTCCTGGCATTACATTTTAAATAATATGTGA 744
QY 120 AGTGATAGAGAGACTGCACTGTCTCAATAGCCTAGGCGTGAATTTTGTCAATAAATAA 179
DB 745 AGTGATAGAGAGACTGCACTGTCTCAATAGCCTAGGCGTGAATTTTGTGCGGTGAAT-A 803
QY 180 AATAAATCATCATCCTTTTGTGATTAATAA 213
DB 804 AATAAATCATCANCCTTTTGTGATTAATAA 837

```

```

RESULT 3
US-09-224-110-8
: Sequence 8, Application US/09224110
: Patent No. 6337195
: GENERAL INFORMATION:
: APPLICANT: Yu, Guo-Liang
: APPLICANT: Rosen, Craig
: TITLE OF INVENTION: Colon Specific Genes and Proteins
: NUMBER OF SEQUENCES: 24
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,
: ADDRESSEE: Stewart & Olstein

```

```

: STREET: 6 Becker Farm Road
: CITY: Roseland
: STATE: NJ
: COUNTRY: USA
: ZIP: 07068-1739
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: OPERATING SYSTEM: IBM PC compatible
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/09/224,110
: FILING DATE:
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/469,667
: FILING DATE: 06-JUN-1995
: ATTORNEY/AGENT INFORMATION:
: NAME: Ferraro, Gregory D.
: REGISTRATION NUMBER: 36,134
: REFERENCE/DOCKET NUMBER: 325800-435
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 201-994-1700
: TELEFAX: 201-994-1744
: INFORMATION FOR SEQ ID NO: 8:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 878 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: cDNA
: FEATURE:
: NAME/KEY: CDS
: LOCATION: 2..685
: US-09-224-110-8

```

```

Query Match      68.9%; Score 166.8; DB 4; Length 878;
Best Local Similarity 91.6%; Pred. No. 4.5e-38;
Matches 196; Conservative 1; Mismatches 15; Indels 2; Gaps 2;

```

```

QY 1 GTTATTCCTCCACAGACTCCGCCAGACACCTAGTCCATGAAGCGTGTCTCTTG 60
DB 625 GTTATTCCTCCACAGACTCCGCCAGACACCTAGTCCATGAAGCGTGTCTCTTG 684
QY 61 T-CCTAATATTCATATCAACAGACACCATTCCTGGCATTACATTTTAAATAATATGTGA 119
DB 685 TCCCTAATATTCATATCAACAGACACCATTCCTGGCATTACATTTTAAATAATATGTGA 744
QY 120 AGTGATAGAGAGACTGCACTGTCTCAATAGCCTAGGCGTGAATTTTGTCAATAAATAA 179
DB 745 AGTGATAGAGAGACTGCACTGTCTCAATAGCCTAGGCGTGAATTTTGTGCGGTGAAT-A 803
QY 180 AATAAATCATCATCCTTTTGTGATTAATAA 213
DB 804 AATAAATCATCANCCTTTTGTGATTAATAA 837

```

```

RESULT 4
PCT-US95-07289-8
: Sequence 8, Application PC/TUS9507289
: GENERAL INFORMATION:
: APPLICANT: Yu, Guo-Liang
: APPLICANT: Rosen, Craig
: TITLE OF INVENTION: Colon Specific Genes and Proteins
: NUMBER OF SEQUENCES: 24
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,
: ADDRESSEE: Stewart & Olstein
: STREET: 6 Becker Farm Road
: CITY: Roseland
: STATE: NJ
: COUNTRY: USA
: ZIP: 07068-1739

```

```
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07289
FILING DATE: 06-JUN-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Ferraro, Gregory D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-265
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 878 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 2..685
PCT-US95-07289-8
```

```
Query Match 68.9%; Score 166.8; DB 5; Length 878;
Best Local Similarity 91.6%; Pred. No. 4.5e-38;
Matches 196; Conservative 1; Mismatches 15; Indels 2; Gaps 2;
```

```
OY 1 GTTATTCCTCCACAGACTCCGCCGAGACACACCTGCTCTGATGAAAGCTCTGCTCTTG 60
DB 625 GTTATTCCTCCACAGACTCCGCCGAGACACACCTGCTCTGATGAAAGCTCTGCTTG 684
OY 61 T-CCTAATATTCATATCAACAGACACCATCTCGCATTCACATTTAAATATATGTGA 119
DB 685 TGCCAAATATTCATATCAACAGACACCATCTCGCATTCACATTTAAATATATGTGA 744
OY 120 AGTGATAGGAGAACTGCAGCTGTCATATAGCCTAGGCTGAATTTTGTCAAGATAATA 179
DB 745 AGTGATAGGAGAACTGCAGCTGTCATATAGCCTAGGCTGAATTTTGTCAAGATAATA 803
OY 180 AATAATCATCATCCTTTTGTGATTATATAA 213
804 AATAATCATCATCCTTTTGTGATTATATAA 837
```

```
RESULT 5
US-08-118-469A-6
Sequence 6, Application US/08118469A
Patent No. 5656451
GENERAL INFORMATION:
APPLICANT: Flavell, Richard A.
APPLICANT: Fikrig, Erol
APPLICANT: Lam, Tuan T.
APPLICANT: Kantor, Fred S.
APPLICANT: Barthold, Stephen W.
TITLE OF INVENTION: NOVEL B. BURGDOFFERI POLYPEPTIDES
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: c/o FISH & NEAVE
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.25
```

```
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/118,469A
FILING DATE: 08-SEP-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/099,757
FILING DATE: 30-JUL-1993
ATTORNEY/AGENT INFORMATION:
NAME: Haley Jr., James F.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: YU-102CIP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
TELEFAX: (212) 596-9090
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 805 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANT1-SENSE: NO
FEATURE:
NAME/KEY: CDS
LOCATION: 130..711
US-08-118-469A-6
```

```
Query Match 14.0%; Score 33.8; DB 1; Length 805;
Best Local Similarity 49.7%; Pred. No. 0.8;
Matches 86; Conservative 0; Mismatches 87; Indels 0; Gaps 0;
```

```
OY 70 TCATATCAACAGACCATCTCGCATTCACATTTAAATATATGTCGAAGTGCATAGG 129
DB 1 TCATATTAATTAAGACCTCTGTCATTTAATTAATTAATTAAGTGCATAGG 60
OY 130 AGAATGAGCGTCATATAGCCTAGGCTGAATTTTGTCAATATAATAATATCAT 189
DB 61 AATATAATTAATTAATTAAGCTTCTTTAATTTAATATATGATTAATAATAATTAAGG 120
OY 190 TCATCCTTTTGTGATTAATAATTTCTAAATGTAATTTAGACTCTGCT 242
DB 121 AGAATTTTATGTAATAAATAGGTTTAAACATTTTGTGATTCCTTT 173
```

```
RESULT 6
US-08-909-119-6
Sequence 6, Application US/08909119
Patent No. 5807685
GENERAL INFORMATION:
APPLICANT: Flavell, Richard A.
APPLICANT: Fikrig, Erol
APPLICANT: Lam, Tuan T.
APPLICANT: Kantor, Fred S.
APPLICANT: Barthold, Stephen W.
TITLE OF INVENTION: NOVEL B. BURGDOFFERI POLYPEPTIDES
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: c/o FISH & NEAVE
STREET: 1251 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/909,119
FILING DATE: 11-AUG-1997
CLASSIFICATION: 435
```







CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/558,588  
FILING DATE: October 30, 1995  
APPLICATION NUMBER: 08/510,584  
FILING DATE: August 2, 1995  
APPLICATION NUMBER: 08/418,096  
FILING DATE: April 5, 1995  
APPLICATION NUMBER: 08/408,584  
FILING DATE: March 20, 1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Warburg, Richard J.  
REGISTRATION NUMBER: 32,327  
REFERENCE/DOCKET NUMBER: 219/075  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440  
TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 10684 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
DESCRIPTION: Sequence between exon 1 and exon 2  
Patent No. 6068976  
US-08-618-1008-3

Query Match 13.7%; Score 33.2; DB 3; Length 10684;  
Best Local Similarity 59.6%; Pred. No. 2.6;  
Matches 56; Conservative 0; Mismatches 38; Indels 0; Gaps 0;

QY 138 AGCTGCAATAGCTAGGCTGATTTTGTGACATAAATAAATTAATCATTCACCTT 197  
DB 9399 AGATGGCAATATTAGTAGGATCTTTCTGGCAATACAAATAAACAAGCTGTCTCA 9340  
QY 198 TTTTTCATTTAAATTTCTTAATTAATGTAATTT 231  
DB 9339 TATATTATTATATGTTTGTCAACACCAATGTT 9306

RESULT 12  
US-08-487-826B-13  
Sequence 13, Application US/08487826B  
Patent No. 5993827  
GENERAL INFORMATION:  
APPLICANT: Sim, Kim L.  
APPLICANT: Chitnis, Chetan  
APPLICANT: Miller, Louis H.  
APPLICANT: Peterson, David S.  
APPLICANT: Su, Xin-zhaun  
APPLICANT: Wellens, Thomas E.  
TITLE OF INVENTION: BINDING DOMAINS FROM PLASMODIUM VIVAX  
TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM ERYTHROCYTE BINDING PROTEINS  
NUMBER OF SEQUENCES: 45  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Knobbe Martens Olson & Bear  
STREET: 620 Newport Center Drive 16th Floor  
CITY: Newport Beach  
STATE: California  
COUNTRY: US  
ZIP: 92660  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/487,826B  
FILING DATE: 10-SEP-1993  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:

NAME: Israelsen, Ned  
REGISTRATION NUMBER: 29,655  
REFERENCE/DOCKET NUMBER: NIH121.001CP1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (619) 235-8550  
TELEFAX: (619) 235-0176  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 19124 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
US-08-487-826B-13

Query Match 13.5%; Score 32.6; DB 2; Length 19124;  
Best Local Similarity 53.5%; Pred. No. 4.7;  
Matches 68; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

QY 101 ATTTTAAATTTATGTCGAGTGGATGAGAACTGCAGCTGTCATAGCGCTAGCGCTGA 160  
DB 3714 ATATATATTATTATTATTATGATGATTTAGTGATGATTTATTAATAAACCATTGAGA 3773  
QY 161 ATTTTGTCAATTAATAAATAATCAATTCATCTTTTGTGATTATAAAATTTCTA 220  
DB 3774 GAATAGAACATTAATTAATTAATTAATTAATGAACCTTCATTTATGTTATATGTTAT 3833  
QY 221 AATGTA 227  
DB 3834 AAAATA 3840

RESULT 13  
US-08-233-008A-7/C  
Sequence 7, Application US/08233008A  
Patent No. 5578480  
GENERAL INFORMATION:  
APPLICANT: Khandke, Kiran M.  
TITLE OF INVENTION: Methods For The Isolation And  
TITLE OF INVENTION: Purification Of The Recombinantly Expressed chondroitinase  
NUMBER OF SEQUENCES: 8  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: American Cyanamid Company  
STREET: One Cyanamid Plaza  
CITY: Wayne  
STATE: New Jersey  
COUNTRY: U.S.A.  
ZIP: 07470-8426  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/233,008A  
FILING DATE: 22-APR-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Gordon, Alan M.  
REGISTRATION NUMBER: 30,637  
REFERENCE/DOCKET NUMBER: 31,885-01  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-831-3244  
TELEFAX: 201-831-3305  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 6519 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 3238..6276  
US-08-233-008A-7

Query Match 13.1%; Score 31.6; DB 1; Length 6519;  
Best Local Similarity 58.5%; Pred. No. 6.4;  
Matches 53; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

QY 141 TGTCAATAGCTAGGCGCTGATTTTGTGATATAATAATAATCATTCCTTTT 200  
DB 6414 TATCATATATAAGCATGCTATTATTTTTCATTAATAATATCATTCCTTAA 6355

QY 201 TTGATATATAATTTTCTAATAATGATTTTACA 234  
6354 CTTGTTTTTAATTTTATAATAAGAGCTCGA 6321

## RESULT 14

US-09-328-111-731/C  
Sequence 731, Application US/09328111  
Patent No. 6262333  
GENERAL INFORMATION:  
APPLICANT: Endege, Wilson O.  
APPLICANT: Steinhmann, Kathleen E.  
APPLICANT: Astle, Jon H.  
APPLICANT: Burgess, Christopher C.  
APPLICANT: Bushnell, Steven E.  
APPLICANT: Carroll III, Eddie  
APPLICANT: Catino, Theodore J.  
APPLICANT: Dertl, Adnan  
APPLICANT: Ford, Donna M.  
APPLICANT: Lewis, Marcia E.  
APPLICANT: Monahan, John E.  
APPLICANT: Schlegel, Robert  
TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION  
TITLE OF INVENTION: PRODUCTS  
FILE REFERENCE: CCD-257 (US)  
CURRENT APPLICATION NUMBER: US/09/328,111  
CURRENT FILING DATE: 1999-06-08  
EARLIER APPLICATION NUMBER: US 60/088,801  
EARLIER FILING DATE: 1998-06-10  
NUMBER OF SEQ ID NOS: 850  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 731  
LENGTH: 639  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (1)...(639)  
OTHER INFORMATION: n = A,T,C or G  
US-09-328-111-731

Query Match

Best Local Similarity 12.6%; Score 30.6; DB 4; Length 639;  
Matches 75; Conservative 0; Mismatches 74; Indels 0; Gaps 0;

QY 83 ACCATTCCTGGATGCACATTTTAAATAATATGATGAGATGAGACAGTGCAGCTG 142  
DB 334 ACAATTCCTTAATGCCCTCTAGGCTTTGAGGAGGAGGAGGAAATGCGACATG 275  
QY 143 TCAATAGCTAGGCGCTGATTTTGTGATATAATAATAATCATTCCTTTT 202  
DB 274 TGCATCACAAGGAGATTTTCTTCATATAATAAAGTCACAGTACCTTTACTA 215  
QY 203 TCAATATAAATTTTCTAATAATGATTTT 231  
DB 214 TGTTTGGCAATAGCCAGATTTTATCT 186

## RESULT 15

US-08-714-918-16

Sequence 16, Application US/08714918  
Patent No. 6037123  
GENERAL INFORMATION:

APPLICANT: Benton, Bret  
APPLICANT: Lee, Ving  
APPLICANT: Malouin, Francois  
APPLICANT: Martin, Patrick K.  
APPLICANT: Schmid, Molly B.  
APPLICANT: Sun, Dongxu

TITLE OF INVENTION: STAPHYLOCOCCUS AUREUS ANTIBACTERIAL  
TITLE OF INVENTION: TARGET GENES  
NUMBER OF SEQUENCES: 111  
CORRESPONDENCE ADDRESS:

ADDRESSEE: Lyon & Lyon  
STREET: 633 West Fifth Street  
CITY: Los Angeles  
STATE: California  
COUNTRY: U.S.A.  
ZIP: 90071-2066

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb  
MEDIUM TYPE: storage  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: IBM P.C. DOS 5.0  
SOFTWARE: Word Perfect 5.1

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/714,918  
FILING DATE: September 13, 1996

CLASSIFICATION: 424  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/009,102  
FILING DATE: December 22, 1995  
APPLICATION NUMBER: 60/003,798  
FILING DATE: September 15, 1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Waidburg, Richard J.  
REGISTRATION NUMBER: 32,327  
REFERENCE/DOCKET NUMBER: 222/005  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (213) 489-1600  
TELEFAX: (213) 955-0440

TELEX: 67-3510  
INFORMATION FOR SEQ ID NO: 16:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2018 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear

US-08-714-918-16

Query Match

Best Local Similarity 12.6%; Score 30.6; DB 3; Length 2018;  
Matches 54; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

QY 130 AGAAGTCAGCTGTCATAGCTAGGCGCTGAATTTTGTGATATAATAATAATCAT 189  
DB 943 AAAATACGACATTAATTTTGTGATATAATAATTTTGTGATATAATAATCATTAAG 1002  
QY 190 TCATCCTTTTGTGATATAATAATTTTCTAATA 222  
DB 1003 TCATCCTCCTGCTGATATATCTCGCTGTAA 1035

Search completed: October 17, 2002, 11:15:00  
Job Time : 16.7199 secs

*This Page Blank (uspto)*

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 6.79735 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-16  
Perfect score: 421  
Sequence: 1 GTTATTCCTCCACAGACTC.....ATGTATTTTACACTTCCTGT 242

Scoring table:  
BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 segs, 24425594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters: -DEV-xlh  
-MODEL=frame+np2p.model -DEV-xlh  
-O=/cgn2\_1/USPTO\_Spool/US09049696/runat\_16102002\_115821\_24739/app\_query.fasta\_1.13694  
-DB-Issued\_Patents\_AA -QEMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0  
-LOOEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=Dlosum62 -TRANS=human40.cdi  
-LIST=45 -DOCALLIGN=200 -THR\_SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTPMT=ptc -NOR=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000  
-USER=US09049696 -RCGN\_1\_1\_57 -runat\_16102002\_115821\_24739 -NCPU=6 -ICPU=3  
-NO\_XLPRX -NO\_MMAB -LARGEOVERT -NEG\_SCORES=0 -WAIT -LONGLOG -DEV.TIMEOUT=120  
-WARN.TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6 -Fgapext=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELop=6 -DELEXT=7

Database : Issued Patents AA:\*

- 1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*
- 2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*
- 3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*
- 4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*
- 5: /cgn2\_6/ptodata/2/1aa/PCTus.COMB.pep:\*
- 6: /cgn2\_6/ptodata/2/1aa/Backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	278	66.0	914	4	US-09-193-562D-28
2	116	27.6	228	1	US-08-469-667-9
3	116	27.6	228	4	US-09-224-110-9
4	116	27.6	228	5	PCT-US95-07289-9
5	63	15.0	910	4	US-08-460-269C-2
6	63	15.0	911	4	US-08-460-269C-4
7	63	15.0	922	4	US-08-460-269C-6
8	62.5	14.8	505	4	US-08-426-509A-17
9	62.5	14.8	505	4	PCT-US95-05008-17
10	61	14.5	214	1	US-08-217-327-4
11	61	14.5	933	2	US-08-313-200-1
12	61	14.5	933	5	PCT-US93-03837-1

13	61	14.5	1070	3	US-08-922-635-22	Sequence 22, Appl
14	60.5	14.4	878	4	US-09-141-212-8	Sequence 8, Appl
15	60.5	14.4	878	4	US-09-561-138-8	Sequence 8, Appl
16	60	14.3	197	4	US-08-936-165A-509	Sequence 509, App
17	60	14.4	408	2	US-08-742-440A-6	Sequence 6, Appl
18	59	14.0	323	4	US-09-029-213B-25	Sequence 25, Appl
19	58	13.9	1584	4	US-09-251-645-6	Sequence 6, Appl
20	57	13.5	1079	3	US-09-058-489-22	Sequence 22, Appl
21	57	13.5	1240	3	US-09-058-489-23	Sequence 23, Appl
22	57	13.5	1347	3	US-09-058-489-24	Sequence 24, Appl
23	56	13.3	348	3	US-08-415-655-5	Sequence 5, Appl
24	56	13.3	348	3	US-08-415-655-13	Sequence 13, Appl
25	56	13.3	348	3	US-08-415-655-15	Sequence 15, Appl
26	56	13.3	447	4	US-09-378-255-2	Sequence 2, Appl
27	56	13.3	447	4	US-09-715-336-2	Sequence 2, Appl
28	56	13.3	475	4	US-09-251-372-2	Sequence 2, Appl
29	56	13.3	475	4	US-09-811-241-2	Sequence 2, Appl
30	56	13.3	574	4	US-09-552-351-2	Sequence 2, Appl
31	56	13.3	574	4	US-09-802-839-2	Sequence 2, Appl
32	56	13.3	786	4	US-09-103-429A-3	Sequence 3, Appl
33	56	13.3	805	4	US-09-103-429A-4	Sequence 4, Appl
34	56	13.3	879	4	US-09-141-212-6	Sequence 6, Appl
35	56	13.3	879	4	US-09-561-138-6	Sequence 6, Appl
36	56	13.3	880	2	US-08-916-917-12	Sequence 12, Appl
37	56	13.3	880	3	US-09-225-170-12	Sequence 12, Appl
38	56	13.3	880	4	US-09-378-255-6	Sequence 6, Appl
39	56	13.3	880	4	US-09-141-212-2	Sequence 2, Appl
40	56	13.3	880	4	US-09-141-212-4	Sequence 4, Appl
41	56	13.3	880	4	US-09-552-351-4	Sequence 4, Appl
42	56	13.3	880	4	US-09-251-372-6	Sequence 6, Appl
43	56	13.3	880	4	US-09-561-138-2	Sequence 2, Appl
44	56	13.3	880	4	US-09-561-138-4	Sequence 4, Appl
45	56	13.3	880	4	US-09-715-336-6	Sequence 6, Appl

## ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
Sequence 28, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617/0052  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/09/193, 562D  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 28  
; LENGTH: 914  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-28  
Alignment Scores:  
Pred. No.: 1,1e-28 Length: 914  
Score: 278.00 Matches: 50  
Percent Similarity: 100.00% Conservative: 0  
Best Local Similarity: 100.00% Mismatches: 0  
Query Match: 66.03% Indels: 0  
Gaps: 0  
US-09-049-696-16 (1-242) x US-09-193-562D-28 (1-914)  
QY 2 TTTATTCCTCCACAGACCGCAGACACCTACTCGATGGAAGCTGCTCCTGT 61  
DB 865 PheileProPglrthProProglutthProSerProAspGluThrSeraLaProCys 884  
QY 62 CCTATATTCATATCAGACGACCACTTCCTGCATTCATTTAAATAATATGTGGAAG 121  
|||||

```

Db      885   ProinsIIHisIleAsnSerThrIleProGlyIleHisIleLeuLysIleMetTrpLys 904
QY      122   TGGATAGAGAACTGCACGTCAATACC 151
          |||||
Db      905   TrpIleGlyIleuGlnIleuSerIleAla 914

RESULT 2
US-08-469-667-9
; Sequence 9, Application US/08469667
; Patent No. 5733748
; GENERAL INFORMATION:
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Rosen, Craig
; TITLE OF INVENTION: Colon Specific Genes and Proteins
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Carella, Byrne, Bain, Giffillan, Cecchi,
; STREET: Stewart & Olstein
; CITY: Roseland
; STATE: NJ
; COUNTRY: USA
; ZIP: 07068-1739
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,667
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Ferraro, Gregory D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-435
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 228 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-469-667-9

Alignment Scores:
Pred. No.: 2.33e-07 Length: 228
Score: 116.00 Matches: 20
Percent Similarity: 100.00% Conservative: 0
Local Similarity: 100.00% Mismatches: 0
Query Match: 27.55% Indels: 0
DB: 1 Gaps: 0

US-09-049-696-16 (1-242) x US-08-469-667-9 (1-228)
QY      2   TTATTCCCTCCACAGACTCGGCACAGACACTACTCCTGATGAAGCTGTCCTCTTGT 61
          |||||
Db      209   PheIleProGlnThrProGluThrProSerProAspGluThrSerAlaProCys 228

RESULT 3
US-09-224-110-9
; Sequence 9, Application US/09224110
; Patent No. 6337195
; GENERAL INFORMATION:
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Rosen, Craig
; TITLE OF INVENTION: Colon Specific Genes and Proteins
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Carella, Byrne, Bain, Giffillan, Cecchi,
; STREET: Stewart & Olstein
; CITY: Roseland
; STATE: NJ
; COUNTRY: USA
; ZIP: 07068-1739
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/224,110
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Ferraro, Gregory D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-435
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 228 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-224-110-9

```

```

STREET: 6 Becker Farm Road
CITY: Roseland
STATE: NJ
COUNTRY: USA
ZIP: 07068-1739
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/224,110
CLASSIFICATION:
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/469,667
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Ferraro, Gregory D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-435
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 228 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-224-110-9

Alignment Scores:
Pred. No.: 2.33e-07 Length: 228
Score: 116.00 Matches: 20
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 27.55% Indels: 0
DB: 4 Gaps: 0

US-09-049-696-16 (1-242) x US-09-224-110-9 (1-228)
QY 2 TTTATTTCTCCACAGACTCCGCCAGACACTAGTCTGATGAACGTCCTCTTGT 61
Db 209 PhetleProptogInThrProptoglInhrProserProaspgInuInserAlaProCys 228

RESULT 4
PCT-US95-07289-9
Sequence 9, Application PC/TUS9507289
GENERAL INFORMATION:
APPLICANT: Yu, Guo-Liang
APPLICANT: Rosen, Craig
TITLE OF INVENTION: Colon Specific Genes and Proteins
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,
ADDRESSEE: Stewart & Olstein
STREET: 6 Becker Farm Road
CITY: Roseland
STATE: NJ
COUNTRY: USA
ZIP: 07068-1739
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/07289
CLASSIFICATION:
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Ferraro, Gregory D.

```

```

1  REGISTRATION NUMBER: 36,134
2  REFERENCE/DOCKET NUMBER: 325800-265
3  TELECOMMUNICATION INFORMATION:
4  TELEPHONE: 201-994-1700
5  TELEFAX: 201-994-1744
6  INFORMATION FOR SEQ ID NO: 9:
7  SEQUENCE CHARACTERISTICS:
8  LENGTH: 228 amino acids
9  TYPE: amino acid
10  TOPOLOGY: linear
11  MOLECULE TYPE: protein
12  PCT-US95-07289-9
13
14  Alignment Scores:
15  Pred. NO.: 2.33e-07 Length: 228
16  Score: 116.00 Matches: 20
17  Percent Similarity: 100.00% Conservative: 0
18  Best Local Similarity: 100.00% Mismatches: 0
19  Very Match: 27.55% Indels: 0
20  Gaps: 0
21
22  US-09-049-696-16 (1-242) x PCT-US95-07289-9 (1-228)
23
24  Oy 2 TTTATCTCTCAGACAGACCGCCAGACACCTAGTCTGTGAAGCTGCTCTTGT 61
25  |||||||
26  Db 209 PhelleProGlnIuHrProGlnIuHrProSerProAspGluHrSerAlaProCys 228
27
28  RESULT 5
29  US-08-460-269C-2
30  Sequence 2, Application US/08460269C
31  Patent No. 6197548
32  GENERAL INFORMATION:
33  APPLICANT: CLARE, JEFFREY J.
34  ROMANOS, MICHAEL A.
35  TITLE OF INVENTION: EXPRESSION OF HETEROLOGOUS PROTEIN IN YEAST
36
37  NUMBER OF SEQUENCES: 17
38  CORRESPONDENCE ADDRESS:
39  ADDRESSEE: Millen, White, Zelano & Branigan, P.C.
40  STREET: 2200 Clarendon Blvd., Suite 1400
41  CITY: ARLINGTON
42  STATE: VA
43  COUNTRY: USA
44  ZIP: 22201
45
46  COMPUTER READABLE FORM:
47  MEDIUM TYPE: floppy disk
48  COMPUTER: IBM PC compatible
49  OPERATING SYSTEM: PC-DOS/MS-DOS
50  SOFTWARE: PatentIn Release #1.0, Version #1.30
51
52  CURRENT APPLICATION DATA:
53  APPLICATION NUMBER: US/08/460,269C
54  FILING DATE: 02-Jun-1995
55  ATTORNEY/AGENT INFORMATION:
56  NAME: lebovitz, Richard M.
57  REGISTRATION NUMBER: 37,067
58  REFERENCE/DOCKET NUMBER: Popov-2
59  TELECOMMUNICATION INFORMATION:
60  TELEPHONE: (703) 243-6333
61  TELEFAX: (703) 243-6410
62
63  INFORMATION FOR SEQ ID NO: 2:
64  SEQUENCE CHARACTERISTICS:
65  LENGTH: 910 amino acids
66  TYPE: amino acid
67  TOPOLOGY: linear
68  MOLECULE TYPE: protein
69  SEQUENCE DESCRIPTION: SEQ ID NO: 2:
70  US-08-460-269C-2
71
72  Alignment Scores:
73  Pred. NO.: 2.96 Length: 910
74  Score: 63.00 Matches: 19
75  Percent Similarity: 47.46% Conservative: 9
76  Best Local Similarity: 32.20% Mismatches: 15

```

Query Match:	14.96%	Indels:	16
DB:	4	Gaps:	4
US-09-049-696-16 (1-242) x US-08-460-269C-2 (1-910)			
OY	8 CCTCCACAGACTCGGCAGAGACACTAGTCTGAT-----GAAAGCTCT	52	:::
Db	588 ProProGlnInPrroGlnAlaProlalProGlnProProAlaGlAylarGluLeuSer	607	
OY	53 GCTCCTTGCTCATATTTCATATCAACAGCACCAATCCTGGCATTCACATTTAAAAATT	112	
Db	608 Ala---AlaAlaAsnAlaAlaValAsnThr-----GlyGlyValGlyLeuAlaSerThr	624	::  ::    :: ::  ::
OY	113 ATGTG-----AAGTGAATAGAAGACTGCAGCTGTCA	115	:::
Db	625 LeutPrTyrlaGluSerAsnAlaLeuSerLysArGleuGlyGluLeuArgLeuAsn	643	::  ::
RESULT 6			
US-08-460-269C-4			
; Sequence 4, Application US/08460269C			
; Patent No. 6197548			
; GENERAL INFORMATION:			
; APPLICANT: CLARE, JEFFREY J.			
; ROMANOS, MICHAEL A.			
TITLE OF INVENTION: EXPRESSION OF HETEROLOGOUS PROTEIN IN YEAST			
NUMBER OF SEQUENCES: 17			
CORRESPONDENCE ADDRESS:			
ADDRESSEE: Milten, White, Zelano & Branigan, P.C.			
STREET: 2200 Clarendon Blvd., Suite 1400			
CITY: ARLINGTON			
STATE: VA			
COUNTRY: USA			
ZIP: 22201			
COMPUTER READABLE FORM:			
MEDIUM TYPE: Floppy disk			
COMPUTER: IBM PC compatible			
OPERATING SYSTEM: PC-DOS/MS-DOS			
SOFTWARE: Patentin Release #1.0, Version #1.30			
CURRENT APPLICATION DATA:			
APPLICATION NUMBER: US/08/460,269C			
FILING DATE: 02-Jun-1995			
ATTORNEY/AGENT INFORMATION:			
NAME: Lebovitz, Richard M.			
REGISTRATION NUMBER: 37,067			
REFERENCE/DOCKET NUMBER: Popov-2			
TELECOMMUNICATION INFORMATION:			
TELEPHONE: (703) 243-6333			
TELEFAX: (703) 243-6410			
INFORMATION FOR SEQ ID NO: 4:			
SEQUENCE CHARACTERISTICS:			
LENGTH: 911 amino acids			
TYPE: amino acid			
TOPOLOGY: linear			
MOLECULE TYPE: protein			
SEQUENCE DESCRIPTION: SEQ ID NO: 4:			
US-08-460-269C-4			
Alignment Scores:			
Pred. No.:	2.96	Length:	911
Score:	63.00	Matches:	19
Percent Similarity:	47.46%	Conservative:	9
Best Local Similarity:	32.20%	Mismatches:	15
Query Match:	14.96%	Indels:	16
DB:	4	Gaps:	4
US-09-049-696-16 (1-242) x US-08-460-269C-4 (1-911)			
OY	8 CCTCCACAGACTCGGCAGAGACACTAGTCTGAT-----GAAAGCTCT	52	
Db	589 ProProGlnInPrroGlnAlaProlalProGlnProProAlaGlAylarGluLeuSer	608	
OY	53 GCTCCTTGCTCATATTTCATATCAACAGCACCAATCCTGGCATTCACATTTAAAAATT	112	

DB 609 Ala---AlaAlaAsnAlaAlaValAsnThr-----GlyGlyValGlyLeuAlaSerThr 625  
QY 113 ATGTGG-----AAGTGGATAGAGAGACTGCAGCTGTCA 145  
DB 626 LeuTrpTyrAlaIaIuSerAsnAlaLeuSerLysArgLeuGlyGlyLeuArgLeuAsn 644  
RESULT 7  
US-08-460-269C-6  
Sequence 6, Application US/08460269C  
Patent No. 6197548  
GENERAL INFORMATION:  
APPLICANT: CLARE, JEFFREY J.  
TITLE OF INVENTION: EXPRESSION OF HETEROLOGOUS PROTEIN IN YEAST  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Millen, White, Zelano & Branigan, P.C.  
STREET: 2200 Clarendon Blvd., Suite 1400  
CITY: ARLINGTON  
STATE: VA  
COUNTRY: USA  
ZIP: 22201  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/460,269C  
FILING DATE: 02-Jun-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Lebovitz, Richard M.  
REGISTRATION NUMBER: 37,067  
REFERENCE/DOCKET NUMBER: Popov-2  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (703) 243-6333  
TELEFAX: (703) 243-6410  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 922 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 6:  
US-08-460-269C-6  
Alignment Scores:  
Pred. No.: 2,96 Length: 922  
Score: 63.00 Matches: 19  
Percent Similarity: 47.46% Conservative: 9  
Best Local Similarity: 32.20% Mismatches: 15  
Query Match: 14.96% Indels: 16  
Gaps: 4  
US-09-049-696-16 (1-242) x US-08-460-269C-6 (1-922)  
QY 8 CCTCCAGAGACTCGCCAGAGACCTAGTCTGAT-----GAACGCTCT 52  
DB 600 ProProGlnArgGlnProGlnAlaProAlaProAlaGlyArgGlyLeuSer 619  
QY 53 GCTCCTGTTCTAATATTCATCAACGACCATTCCTGCATTCACATTTAAAT 112  
DB 620 Ala---AlaAlaAsnAlaAlaValAsnThr-----GlyGlyValGlyLeuAlaSerThr 636  
QY 113 ATGTGG-----AAGTGGATAGAGAGACTGCAGCTGTCA 145  
DB 637 LeuTrpTyrAlaIaIuSerAsnAlaLeuSerLysArgLeuGlyGlyLeuArgLeuAsn 655  
RESULT 8  
US-08-426-509A-17  
Sequence 17, Application US/08426509A

Patent No. 6326469  
GENERAL INFORMATION:  
APPLICANT: Villrich, Axel  
APPLICANT: Gashizsky, Mikhail  
APPLICANT: Sures, Irman G.  
TITLE OF INVENTION: NOVEL MEGAKARYOCYTIC PROTEIN  
TITLE OF INVENTION: TYROSINE KINASES  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York,  
STATE: NY  
COUNTRY: USA  
ZIP: 10036-2711  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/426,509A  
FILING DATE: 21-APR-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/232,545  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Coruzzi, Laura A  
REGISTRATION NUMBER: 30,742  
REFERENCE/DOCKET NUMBER: 7683-0074-999  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-790-9090  
TELEFAX: 212-869-9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 505 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
US-08-426-509A-17  
Alignment Scores:  
Pred. No.: 3,14 Length: 505  
Score: 62.50 Matches: 14  
Percent Similarity: 48.28% Conservative: 0  
Best Local Similarity: 48.28% Mismatches: 14  
Query Match: 14.85% Indels: 1  
Gaps: 1  
US-09-049-696-16 (1-242) x US-08-426-509A-17 (1-505)  
QY 11 CCACAGACTCGCCAGAGACCTAGTCTGATGAAAGCTGCTGCTAATAT 70  
DB 25 ProHisCysProValTyrAlaProAspProThrSerThrIleLysProGlyProAsnSer 44  
QY 71 CATATCAACAGACCATTCCTGCAT 97  
DB 45 His---AsnSerAsnThrProGlyIle 52  
RESULT 9  
PCT-US95-05008-17  
Sequence 17, Application PC/TUS9505008  
GENERAL INFORMATION:  
APPLICANT: Sugen, Inc.  
APPLICANT: 515 Galveston Drive  
APPLICANT: Redwood City, California 94063-4720  
APPLICANT: United States of America  
APPLICANT: Wissenschaften E.V.  
APPLICANT: Hofgarten Str. 2  
APPLICANT: Munchen 80539  
APPLICANT: Germany



TITLE OF INVENTION: Novel Megakaryocytic Protein Tyrosine  
TITLE OF INVENTION: Kinases  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/05008  
FILING DATE: 24-APR-1995  
CLASSIFICATION:  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 08/232,545  
FILING DATE: 22-APR-1994  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Coruzzi, Laura A.  
REGISTRATION NUMBER: 30,742  
REFERENCE/DOCKET NUMBER: 7683-074  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212)790-9090  
TELEFAX: (212)869-9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 505 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: protein  
PCT-US95-05008-17

Alignment Scores:  
Pred. No.: 3.14 Length: 505  
Score: 62.50 Matches: 14  
Percent Similarity: 48.28% Conservative: 0  
Best Local Similarity: 48.28% Mismatches: 14  
Query Match: 14.85% Indels: 1  
Gaps: 1

US-09-049-696-16 (1-242) x PCT-US95-05008-17 (1-505)

QY 11 CCACAGACTCCGCCGACAGACCTAGTCTGATGAACGTCCTGCTCTAATATT 70  
DB 25 ProHiscysProValTyrValProAspProThrSerThrIleLysProLysProAsnSer 44

QY 71 CATATCAACAGCACCATTCTCGCATTT 97  
DB 45 His---AsnSerAsnThrProLysIle 52

RESULT 10  
US-08-217-327-4  
Sequence 4, Application US/08217327  
Patent No. 5474925  
GENERAL INFORMATION:  
APPLICANT: John, Maliyakal E  
APPLICANT: Barton, Kenneth A  
TITLE OF INVENTION: Immobilized Proteins in Cotton Fiber  
NUMBER OF SEQUENCES: 16  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Quarles and Brady  
STREET: P.O. Box 2113  
CITY: Madison  
STATE: WI  
COUNTRY: USA

ZIP: 53701-2113  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/217,327  
FILING DATE:  
CLASSIFICATION: 435  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/812,233  
FILING DATE: 19-DEC-1991  
ATTORNEY/AGENT INFORMATION:  
NAME: Seay, Nicholas J  
REGISTRATION NUMBER: 27,386  
REFERENCE/DOCKET NUMBER: 1122990831  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 608-251-5000  
TELEFAX: 608-251-9166  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 214 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-217-327-4

Alignment Scores:  
Pred. No.: 4.32 Length: 214  
Score: 61.00 Matches: 12  
Percent Similarity: 46.67% Conservative: 2  
Best Local Similarity: 40.00% Mismatches: 16  
Query Match: 14.49% Indels: 0  
Gaps: 0

US-09-049-696-16 (1-242) x US-08-217-327-4 (1-214)

QY 8 CCTCCACAGACTCCGCCGACAGACCTAGTCTGATGAACGTCCTGCTCTAAT 67  
DB 124 ProProLalThrProProProLalThrProProLalThrProProLalThrProProLalThrPro 143

QY 68 ATTGATATCAACAGCACCATTCTCGCATTT 97  
DB 144 AlaSerProProLalThrValProLalIle 153

RESULT 11  
US-08-313-200-1  
Sequence 1, Application US/08313200  
Patent No. 5968153  
GENERAL INFORMATION:  
APPLICANT: Baker, James R.  
APPLICANT: Koenig, Ronald J.  
TITLE OF INVENTION: THYROID PEROXIDASE EPITOPIC REGIONS  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MORRISON & FOERSTER  
STREET: 755 Page Mill Road  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94304-1018  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/313,200  
FILING DATE: 08-NOV-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Konski, Antoinette F.

REGISTRATION NUMBER: 34,202  
REFERENCE/DOCKET NUMBER: 20344-20658.20  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 813-5600  
TELEFAX: (415) 494-0792  
TELEX: 706141  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 933 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHEICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: N-terminal  
ORIGINAL SOURCE:  
ORGANISM: Homo sapiens  
DEVELOPMENTAL STAGE: Mature  
TISSUE TYPE: Thyroid gland(from people with Grave's  
TISSUE TYPE: disease)  
IMMEDIATE SOURCE:  
CLONE: pTPO-2.8  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: join(1..3, 456..631)  
OTHER INFORMATION: /note= "TPO region within fusion  
OTHER INFORMATION: plasmid: TPO(delta4-455)"  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..120  
OTHER INFORMATION: /note= "C-terminal truncation:  
OTHER INFORMATION: TPO(1-120)"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 1..400  
OTHER INFORMATION: /note= "TPO epitopic region within  
OTHER INFORMATION: fusion protein: MBP-TPO (AA 1-400)"  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..455  
OTHER INFORMATION: /note= "C-terminal truncation-  
OTHER INFORMATION: TPO(1-455) or N-terminal half of TPO"  
FEATURE:  
NAME/KEY: Peptide  
LOCATION: 1..631  
OTHER INFORMATION: /note= "C-terminal truncation:  
OTHER INFORMATION: TPO(1-631)"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 266..281  
OTHER INFORMATION: /note= "TPO epitopic or binding  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 376..631  
OTHER INFORMATION: /note= "TPO epitopic region within  
OTHER INFORMATION: fusion protein: MBP-TPO (AA 376-631)"  
FEATURE:  
NAME/KEY: Region  
LOCATION: join(455..532, 590..933)  
OTHER INFORMATION: /note= "alternatively spliced  
OTHER INFORMATION: C-terminus of TPO"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 455..933  
OTHER INFORMATION: /note= "TPO C-terminus containing  
OTHER INFORMATION: binding region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 456..631  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"

FEATURE:  
NAME/KEY: Region  
LOCATION: 456..633  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 456..933  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 456..933  
OTHER INFORMATION: /note= "TPO region within maltose  
binding fusion protein"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 457..517  
OTHER INFORMATION: /note= "non-reactive fragment"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 457..633  
OTHER INFORMATION: /note= "TPO region within fusion  
OTHER INFORMATION: plasmid pMALTPO"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 457..933  
OTHER INFORMATION: /note= "TPO binding region within  
OTHER INFORMATION: plasmid pMALTPO"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 465..933  
OTHER INFORMATION: /note= "TPO binding region of  
OTHER INFORMATION: maltose binding region fusion construct"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 513..633  
OTHER INFORMATION: /note= "recombinant TPO"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 517..630  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 517..633  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 573..633  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 590..615  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Binding-site  
LOCATION: 590..675  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"  
FEATURE:  
NAME/KEY: Region  
LOCATION: 592..613  
OTHER INFORMATION: /note= "TPO binding or epitopic  
OTHER INFORMATION: region"

```

APPLICATION NUMBER: PCT/US93/03837
FILING DATE: 19930422
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Lewak, Anna M.
REGISTRATION NUMBER: 33006
REFERENCE/DOCKET NUMBER: 2115-00658PPA
TELECOMMUNICATION INFORMATION:
TELEPHONE: (313) 641-1600
TELEFAX: (313) 641-0270
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 933 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
FRAGMENT TYPE: N-terminal
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
DEVELOPMENTAL STAGE: Mature
TISSUE TYPE: Thyroid gland (from people with Grave's
DISEASE)
TISSUE TYPE: disease)
IMMEDIATE SOURCE:
CLONE: pHTRO-2.8
PUBLICATION INFORMATION:
AUTHORS: Kimura, S.
AUTHORS: Kotani, T.
AUTHORS: McBride, O. W.
AUTHORS: Umeki, K.
AUTHORS: Nakayama, T.
AUTHORS: Ohtaki, S.
AUTHORS: Hirai, K.
TITLE: Human thyroid peroxidase: Complete cDNA and
TITLE: protein sequence, chromosome mapping, and
TITLE: identification of two alternately spliced mRNAs
JOURNAL: Proc. Natl. Acad. Sci. U.S.A.
VOLUME: 84
PAGES: 5555-5559
DATE: 1987
RELEVANT RESIDUES IN SEQ ID NO: 1: FROM 1 TO 3048
PCT-US93-03837-1

Alignment Scores:
Pred. No.:
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:

US-09-049-696-16 (1-242) x PCT-US93-03837-1 (1-933)

QY 2 TTATATGTCGACAGACTCG-----CCAGAGACACCTAGTCTGATGAAACG 49
|||:::|||||::: ||| ||||| ||| |||||
Db 366 PheValProIleProIleArgProIleAlaIacysAlaProIleProIleGlyIleThr 385
QY 50 TCGAGTCGTCGT-----CGTATATGTCATGATCAACAGACCATCTCGCATTCACATT 103
||||| ||| |||::: |||:::
Db 386 ATGGLProCysPheLeuAlaGlyAspGlyArgAlaSerGluValProSerIleuThrAla 405
QY 104 TTAATAATTATGTGG 118
|||::: |||
Db 406 LeuHisThrLeuThr 410

RESULT 13
US-08-922-635-22
; Sequence 22, Application US/08922635A
; Patient No. 6033871
; GENERAL INFORMATION:
; APPLICANT: PILETZ, John E.
; APPLICANT: IVANOV, Tina R.
TITLE OF INVENTION: DNA MOLECULES ENCODING IMIDALINE RECEPTIVE POLYPEPTIDES

```





**This Page Blank (uspto)**

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 8.93612 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-14

Perfect score: 248

Sequence: 1 ACCTGAAGCGCGAATTCAC.....TTGAAATGCGCAGACTCT 248

Scoring table:

IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Archived: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database :

Issued\_Patents\_NA:\*  
1: /cgn2-6/ptodata/2/ina/5A.COMB.seq:\*  
2: /cgn2-6/ptodata/2/ina/5B.COMB.seq:\*  
3: /cgn2-6/ptodata/2/ina/6A.COMB.seq:\*  
4: /cgn2-6/ptodata/2/ina/6B.COMB.seq:\*  
5: /cgn2-6/ptodata/2/ina/PCUUS.COMB.seq:\*  
6: /cgn2-6/ptodata/2/ina/Backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result	No.	Score	Query	Match	Length	ID	Description
	1	248	100.0	878	1	US-08-469-667-8	Sequence 8, Appli
	2	248	100.0	878	5	US-09-224-110-8	Sequence 8, Appli
	3	248	100.0	878	5	PCT-US95-07289-8	Sequence 8, Appli
	4	248	100.0	3007	4	US-09-193-562D-27	Sequence 27, Appli
	5	129	52.0	618	4	US-09-385-982-24	Sequence 24, Appli
	6	128.2	51.7	595	4	US-09-385-982-25	Sequence 25, Appli
	7	92.8	37.4	742	4	US-09-385-982-33	Sequence 33, Appli
	8	88.6	35.7	3022	4	US-09-193-562D-33	Sequence 33, Appli
	9	87.4	35.2	3317	4	US-09-193-562D-1	Sequence 1, Appli
	10	82	33.1	3418	4	US-09-193-562D-29	Sequence 29, Appli
	11	65.8	26.5	335	4	US-09-193-562D-14	Sequence 14, Appli
	12	58.4	23.5	2970	4	US-09-193-562D-31	Sequence 31, Appli
	13	44.4	17.9	576	4	US-09-385-982-23	Sequence 23, Appli
	14	35.6	14.4	4211	4	US-09-004-838-106	Sequence 106, App
	15	33	13.3	1984	1	US-07-885-970A-25	Sequence 25, Appli
	16	33	13.3	1985	1	US-08-298-687A-25	Sequence 25, Appli
	17	33	13.3	1985	1	US-08-298-829-25	Sequence 25, Appli
	18	30.8	12.4	864	4	US-08-953-326-12	Sequence 12, Appli
	19	30	12.1	4362	2	US-08-455-073A-1	Sequence 1, Appli
	20	29	11.7	1554	2	US-08-031-538-8	Sequence 8, Appli
	21	29	11.7	1730	1	US-07-817-920-1	Sequence 1, Appli
	22	29	11.7	1730	1	US-08-117-006-1	Sequence 1, Appli
	23	29	11.7	1730	1	US-08-216-594-1	Sequence 1, Appli
	24	29	11.7	1730	5	PCT-US93-00149-1	Sequence 1, Appli
	25	29	11.7	11283	2	US-08-603-753D-3	Sequence 3, Appli
	26	29	11.7	11283	3	US-09-099-753-3	Sequence 3, Appli
	27	29	11.7	11283	4	US-08-986-106-3	Sequence 3, Appli

28	28.8	11.6	5506	4	US-09-004-838-93	Sequence 93, Appli
29	28.8	11.6	11056	4	US-09-004-838-23	Sequence 23, Appli
30	28.8	11.6	12793	4	US-09-004-838-124	Sequence 124, App
31	28.8	11.6	15062	4	US-09-004-838-89	Sequence 89, Appli
32	28.6	11.5	2273	3	US-08-714-918-40	Sequence 40, Appli
33	28.6	11.5	2273	4	US-09-265-315-40	Sequence 40, Appli
34	28.6	11.5	2273	4	US-09-265-315-40	Sequence 40, Appli
35	28.6	11.5	2273	4	US-09-265-315-40	Sequence 40, Appli
36	28.6	11.5	7521	4	US-09-004-838-116	Sequence 116, App
37	28.4	11.5	2275	2	US-08-743-637B-2	Sequence 2, Appli
38	28.4	11.5	2275	3	US-08-526-840B-2	Sequence 2, Appli
39	28.4	11.5	3828	5	PCT-US93-10500-1	Sequence 1, Appli
40	28.4	11.5	4190	2	US-08-488-706-3	Sequence 3, Appli
41	28.4	11.5	7721	3	US-08-772-270A-14	Sequence 14, Appli
42	28.2	11.4	676	1	US-08-259-745A-42	Sequence 42, Appli
43	28.2	11.4	676	1	US-08-259-745A-43	Sequence 43, Appli
44	28.2	11.4	1761	3	US-09-033-055A-3	Sequence 3, Appli
45	28.2	11.4	1761	3	US-09-033-055A-3	Sequence 3, Appli

#### ALIGNMENTS

RESULT 1  
US-08-469-667-8  
Sequence 8, Application US/08469667  
Patent No. 5733748  
GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
APPLICANT: Rosen, Craig  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESSES:  
ADDRESS: Carella, Byrne, Bain, Gillillan, Cecchi,  
ADDRESS: Stewart & Olstein  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ  
COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/469,667  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
US-08-469-667-8  
Query Match 100.0%; Score 248; DB 1; Length 878;  
Best Local Similarity 100.0%; Pred. No. 1,6e-68;  
Matches 248; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 1 ACCTGAAGCGCGAATTCACGCGGCGACATTCATTAATCTGACAGACTCTGCGG 60

Db 306 ACCTGAAGCGGGAATTCACGGGGGAGTCTCATTTATCTGACTTGGACAGCTCCGCGG 365  
Qy 61 ATGATTATGACCATGGAACAGCTCACAAGTATATCATTTGGAATAGTACAAATTTCTTG 120  
Db 366 ATGATTATGACCATGGAACAGCTCACAAGTATATCATTTGGAATAGTACAAATTTCTTG 425  
Qy 121 ATCTGAGAGCAAGTCAATGATCTCTCAAGTGAATCTACTGCTCATCCCAAG 180  
Db 426 ATCTGAGAGCAAGTCAATGATCTCTCAAGTGAATCTACTGCTCATCCCAAG 485  
Qy 181 AACCCAACTCTGAGAGAGTCTTTTGTAAACAGAAAACATTTACTTTGAAAATGCA 240  
Db 486 AACCCAACTCTGAGAGAGTCTTTTGTAAACAGAAAACATTTACTTTGAAAATGCA 545  
Qy 241 CAGATCTT 248  
Db 546 CAGATCTT 553

## RESULT 2

Sequence 8, Application US/09224110  
Patent No. 6337195

GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carella, Byrne, Bain, Giffillan, Cecchi,  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ  
COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/224,110  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/469,667  
FILING DATE: 06-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ. ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
US-09-224-110-8

Query Match 100.0%; Score 248; DB 4; Length 878;  
Best Local Similarity 100.0%; Pred. No. 1.6e-68;  
Matches 248; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 ACCTGAAGCGGGAATTCACGGGGGAGTCTCATTTATCTGACTTGGACAGCTCCGCGG 60

Db 306 ACCTGAAGCGGGAATTCACGGGGGAGTCTCATTTATCTGACTTGGACAGCTCCGCGG 365  
Qy 61 ATGATTATGACCATGGAACAGCTCACAAGTATATCATTTGGAATAGTACAAATTTCTTG 120  
Db 366 ATGATTATGACCATGGAACAGCTCACAAGTATATCATTTGGAATAGTACAAATTTCTTG 425  
Qy 121 ATCTGAGAGCAAGTCAATGATCTCTCAAGTGAATCTACTGCTCATCCCAAG 180  
Db 426 ATCTGAGAGCAAGTCAATGATCTCTCAAGTGAATCTACTGCTCATCCCAAG 485  
Qy 181 AACCCAACTCTGAGAGAGTCTTTTGTAAACAGAAAACATTTACTTTGAAAATGCA 240  
Db 486 AACCCAACTCTGAGAGAGTCTTTTGTAAACAGAAAACATTTACTTTGAAAATGCA 545  
Qy 241 CAGATCTT 248  
Db 546 CAGATCTT 553

## RESULT 3

PCT-US95-07289-8  
Sequence 8, Application PC/TUS9507289

GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carella, Byrne, Bain, Giffillan, Cecchi,  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ  
COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/07289  
FILING DATE: 06-JUN-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-265  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ. ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
PCT-US95-07289-8

Query Match 100.0%; Score 248; DB 5; Length 878;  
Best Local Similarity 100.0%; Pred. No. 1.6e-68;  
Matches 248; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 ACCTGAAGCGGGAATTCACGGGGGAGTCTCATTTATCTGACTTGGACAGCTCCGCGG 60  
Db 306 ACCTGAAGCGGGAATTCACGGGGGAGTCTCATTTATCTGACTTGGACAGCTCCGCGG 365  
Qy 61 ATGATTATGACCATGGAACAGCTCACAAGTATATCATTTGGAATAGTACAAATTTCTTG 120



Db 366 ATGATATATGACCATGGAACAGCTCACAAGTATATCATGTAATTAAGTACAAAGTATCTTG 425  
Oy 121 ATCTGAGACAAAGTTCAATGATCTCTTCAAGTGAATCTACTGCTCTCATCCCAAAG 180  
Db 426 ATCTGAGACAAAGTTCAATGATCTCTTCAAGTGAATCTACTGCTCTCATCCCAAAG 485  
Oy 181 AAGCCAACTCTGAGAAAGCTTTTGTGTTAAACCAAGAAACATTAATTTGAAATGGCA 240  
Db 486 AAGCCAACTCTGAGAAAGCTTTTGTGTTAAACCAAGAAACATTAATTTGAAATGGCA 545  
Oy 241 CAGATCTT 248  
Db 546 CAGATCTT 553

## RESULT 4

US-09-193-562D-27  
Sequence 27, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Fauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193,562D  
PRIOR FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 27  
LENGTH: 3007  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-27

Query Match 100.0%; Score 248; DB 4; Length 3007;  
Best Local Similarity 100.0%; Pred. No. 2,5e-68;  
Matches 248; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 ACCTGAGGCGGAAATTCACGGGGGCGAGTCTCATTAATCTGACTTGGACAGCTCCTGGGG 60  
Db 2319 ACCTGAGGCGGAAATTCACGGGGGCGAGTCTCATTAATCTGACTTGGACAGCTCCTGGGG 2378  
Oy 61 AGGATTTGACCATGGAACAGCTCACAAGTATATCATTTGAGTAAGTAAAGTATCTTG 120  
Db 2379 AGGATTTGACCATGGAACAGCTCACAAGTATATCATTTGAGTAAGTAAAGTATCTTG 2438  
Oy 121 ATCTGAGACAAAGTTCAATGATCTCTTCAAGTGAATCTACTGCTCTCATCCCAAAG 180  
Db 2439 ATCTGAGACAAAGTTCAATGATCTCTTCAAGTGAATCTACTGCTCTCATCCCAAAG 2498  
Oy 181 AAGCCAACTCTGAGAAAGCTTTTGTGTTAAACCAAGAAACATTAATTTGAAATGGCA 240  
Db 2499 AAGCCAACTCTGAGAAAGCTTTTGTGTTAAACCAAGAAACATTAATTTGAAATGGCA 2558  
Oy 241 CAGATCTT 248  
Db 2559 CAGATCTT 2566

## RESULT 5

US-09-385-982-24/C  
Sequence 24, Application US/09385982  
Patent No. 6262334  
GENERAL INFORMATION:  
APPLICANT: ENDEGE, WILSON O., ET AL.  
TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION  
TITLE OF INVENTION: PRODUCTS: II  
FILE REFERENCE: CCDA-260XX  
CURRENT APPLICATION NUMBER: US/09/385,982  
PRIOR FILING DATE: 1999-08-30  
EARLIER APPLICATION NUMBER: 09/328,111

EARLIER FILING DATE: 1999-06-08  
EARLIER APPLICATION NUMBER: 60/117,393  
EARLIER FILING DATE: 1999-01-27  
EARLIER APPLICATION NUMBER: 60/098,639  
EARLIER FILING DATE: 1998-08-31  
NUMBER OF SEQ ID NOS: 544  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 24  
LENGTH: 618  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc-feature  
LOCATION: (1)-(618)  
OTHER INFORMATION: n = A,T,C or G  
US-09-385-982-24

Query Match 52.0%; Score 129; DB 4; Length 618;  
Best Local Similarity 76.1%; Pred. No. 2.1e-31;  
Matches 159; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Oy 33 ATTAATCTGACTTGGACAGCTCTCGGGATGATTAATGACCATGGAACAGCTCAAGATAT 92  
Db 441 ATTAATCTTACATGACAGCACACGAGATTAATTTGATGTTGAAAAAGTCAACGTAT 382  
Oy 93 ATCATTCGAATAGTACAGTATCTTGTGATCCAGAGCAAGTCAATGATCTCTTCAA 152  
Db 381 ATCATTAAGTATAGTCAAGTATCTTGTGATCCAGAGCAAGTCAATGATCTCTTCAA 322  
Oy 153 GTGAATCTACAGCTCTCACTCCCAAGAGCAACTGAGGAAGTCTTTTGTAA 212  
Db 321 GTAAATCTACAGTCTGATCTGACCAAGAGGCAACTCAAGGAAGCTTTGATTA 262  
Oy 213 CCAGAAACATTAATTTGAAAAATGGCAC 241  
Db 261 CCAGAAATATCTCAGAAAGAAATGCAC 233

## RESULT 6

US-09-385-982-25  
Sequence 25, Application US/09385982  
Patent No. 6262334  
GENERAL INFORMATION:  
APPLICANT: ENDEGE, WILSON O., ET AL.  
TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION  
TITLE OF INVENTION: PRODUCTS: II  
FILE REFERENCE: CCDA-260XX  
CURRENT APPLICATION NUMBER: US/09/385,982  
PRIOR FILING DATE: 1999-08-30  
EARLIER APPLICATION NUMBER: 09/328,111  
EARLIER FILING DATE: 1999-06-08  
EARLIER APPLICATION NUMBER: 60/117,393  
EARLIER FILING DATE: 1999-01-27  
EARLIER APPLICATION NUMBER: 60/098,639  
NUMBER OF SEQ ID NOS: 544  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 25  
LENGTH: 595  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc-feature  
LOCATION: (1)...(595)  
OTHER INFORMATION: n = A,T,C or G  
US-09-385-982-25

Query Match 51.7%; Score 128.2; DB 4; Length 595;  
Best Local Similarity 75.1%; Pred. No. 3.7e-31;  
Matches 157; Conservative 0; Mismatches 52; Indels 0; Gaps 0;  
Oy 33 ATTAATCTGACTTGGACAGCTCTCGGGATGATTAATGACCATGGAACAGCTCAAGATAT 92  
Db 441 ATTAATCTTACATGACAGCACACGAGATTAATTTGATGTTGAAAAAGTCAACGTAT 382



Db 2571 CCAGAACATTTAGAGTGAATAATGGCAC 2599  
RESULT 10  
US-09-193-562D-29  
Sequence 29, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT FILING DATE: 1998-11-17  
CURRENT APPLICATION NUMBER: US/09/193,562D  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 29  
LENGTH: 3418  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-29  
Query Match 33.1%; Score 82; DB 4; Length 3418;  
Best Local Similarity 61.0%; Pred. No. 2e-16;  
Matches 133; Conservative 0; Mismatches 85; Indels 0; Gaps 0;  
Db 24 GCACGCTCATTTAATCGACTTGGACAGACCTCGGGGATGATTAGACCATGGAACACCT 83  
Db 2386 GGACATCATATTCAACTTTCATGAGCTCCCTGGCAAGTCTCGATTAAGAAAGACCT 2445  
Db 84 CACAGATATCATCTTCAATAGTACAGATTTCTTGTGATCTCAGAGCAAGTCAATGAA 143  
Db 2446 GAGAGCTCATATTAGATAGTAAACATTTCTCGACCTCAAGAAAGATTGATGATAA 2505  
Db 144 TCTCTCAAGTAACTACTGCTCTCATCCCAAGAAAGCACTGAGGAAGTCTTT 203  
Db 2506 GCTGCTTTAATAAATACTCTGCTCTGATACCTAAGAGCCCTGGTTCAGTGAAGTTT 2565  
Db 204 TTGTTTAAACGAGAAACATTACTTTTGAATAATGGCAC 241  
Db 2566 GAATTTAAACGAGAAACCTTCTAATAATAGAGATGTAC 2603  
RESULT 11  
US-09-193-562D-14  
Sequence 14, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT FILING DATE: 1998-11-17  
CURRENT APPLICATION NUMBER: US/09/193,562D  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 14  
LENGTH: 335  
TYPE: DNA  
ORGANISM: Artificial sequence  
FEATURE:  
OTHER INFORMATION: Oligonucleotide probe  
US-09-193-562D-14  
Query Match 26.5%; Score 65.8; DB 4; Length 335;  
Best Local Similarity 63.7%; Pred. No. 9.4e-12;  
Matches 100; Conservative 0; Mismatches 57; Indels 0; Gaps 0;  
Db 85 ACAAGTATATCATTCGATAGTACAGATTTCTGATCTCAGAGCAAGTTCAATGAAT 144

Db 3 ACAGTACATTTAATAAGTAAAGATTTCAATGATCTGCAAGAAAGATTGGACAATG 62  
Db 145 CTCTTCAAGTGAATATCTCTCTCATCCCAAGAAAGCAACCTCTAGGAAGTCTTT 204  
Db 63 CGACTTTAGTGAATATCTCTCATATCTTAATGCTTAAGAGGCGGATCAAAAGAAATTTG 122  
Db 205 TGTTTAAACGAGAAACATTACTTTTGAATAATGGCAC 241  
Db 123 AATTTAAGCCAGAAACATTTAGAGTGAATAATGGCAC 159  
RESULT 12  
US-09-193-562D-31  
Sequence 31, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT FILING DATE: 1998-11-17  
CURRENT APPLICATION NUMBER: US/09/193,562D  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 31  
LENGTH: 2970  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-31  
Query Match 23.5%; Score 58.4; DB 4; Length 2970;  
Best Local Similarity 55.4%; Pred. No. 4.4e-09;  
Matches 113; Conservative 0; Mismatches 91; Indels 0; Gaps 0;  
Db 34 TTAATCTGACTTTGGACAGCTCTCGGATGATTATGACATGAGCAAGCTCAAGTATA 93  
Db 2450 TGACCCATATCTTGGACAGCACTGTGAGAAAGCTTTGATGACAGGCGATCAAGCTATG 2509  
Db 94 TCATTCGAATAGTACAGATTTCTTGTGATCTCAGAGCAAGTCAAGATCTCTCAAG 153  
Db 2510 AAATTAAGAAATGATTAAGTCTACAGATATATCAAGATGATTTAACAATCTATTTAG 2569  
Db 154 TGAATACATGCTGCTCATCCCAAGAAAGCAACTCTGAGGAAGTCTTTTGTGTTAAAC 213  
Db 2570 TAAATACATCAAGGAATCTCTGCAAGCTGCAATCAGGAGATATTTAGTTCAC 2629  
Db 214 CAGAAACATTTACTTTGAAATG 237  
Db 2630 CCCAGATTTCCACGAATGCACTG 2653  
RESULT 13  
US-09-385-982-23  
Sequence 23, Application US/09385982  
Patent No. 6262334  
GENERAL INFORMATION:  
APPLICANT: ENDEGE, WILSON O., ET AL.  
TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION  
FILE REFERENCE: CCDNA-260XX  
CURRENT FILING DATE: 1999-08-30  
CURRENT APPLICATION NUMBER: US/09/385,982  
EARLIER APPLICATION NUMBER: 09/328,111  
EARLIER FILING DATE: 1999-06-08  
EARLIER APPLICATION NUMBER: 60/117,393  
EARLIER FILING DATE: 1999-01-27  
EARLIER APPLICATION NUMBER: 60/098,639  
EARLIER FILING DATE: 1998-08-31  
NUMBER OF SEQ ID NOS: 544  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 23  
LENGTH: 576

TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: misc\_feature  
LOCATION: (1)-(576)  
OTHER INFORMATION: n = A,T,C or G  
US-09-385-982-23

Query Match 17.9%; Score 44.4; DB 4; Length 576;  
Best Local Similarity 74.5%; Pred. No. 5.6e-05;  
Matches 82; Conservative 0; Mismatches 26; Indels 2; Gaps 2;

QY 33 ATTAATCTGCTTGACAGCTCCTGGGAGTATTATGACCATGAACAGCTCACAAGTAT 92  
DB 442 ATTATTCTTACATGACGACGACGATTAATTTGATGTGGAAAAGTTCAAGTTAT 501  
QY 93 ATCATTCGATTAAGTACAGTATCTTGATCTGACGACAGCAAGTTCATGA 142  
DB 502 ATCATTAAGATTA-TGCGAGTATCTTGA-CTAAGAGACAGTTTATGA 549

ULT 14  
US-09-004-838-106  
Sequence 106, Application US/09004838  
Patent No. 6350933

GENERAL INFORMATION:  
APPLICANT: Michelmore, Richard W.

APPLICANT: Shen, Kathy

TITLE OF INVENTION: Procedures and Materials for  
NUMBER OF SEQUENCES: 140

CORRESPONDENCE ADDRESS:

ADDRESSEE: Townsend and Townsend and Crew LLP  
STREET: Two Embarcadero Center, Eighth Floor

CITY: San Francisco

STATE: California

COUNTRY: USA

ZIP: 94111-3834

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/004.838

FILING DATE: 09-JAN-1998

CLASSIFICATION: 800

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/781,734

FILING DATE: 10-JAN-1997

ATTORNEY/AGENT INFORMATION:  
NAME: Einhorn, Gregory P.

REGISTRATION NUMBER: 38,440

REFERENCE/DOCKET NUMBER: 023070-078810US

TELEPHONE: (415) 576-0200

TELEFAX: (415) 576-0300

INFORMATION FOR SEQ ID NO: 106:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 4211 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA  
FEATURE:  
NAME/KEY: -  
LOCATION: 1..4211  
OTHER INFORMATION: /note= "RG2J"

Query Match 14.4%; Score 35.6; DB 4; Length 4211;  
Best Local Similarity 50.0%; Pred. No. 0.067;

Matches 89; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 6 AAGCGGAATTCAGGGGGGAGCTCTCAATTAATCTGACCTTGCGGAGTAT 65  
DB 208 TAACTGCAATGAATGATGATGATGATGATGATGATGATGATGATGAT 2087  
QY 66 TATGACATGACAGCTCAGATATATATATATATATATATATATATATAT 125  
DB 2088 TAAATGCAATGCTCAGTGAAGATATATATATATATATATATATATAT 2147  
QY 126 AGAGACAATGATATATATATATATATATATATATATATATATATATAT 183  
DB 2148 AGTGGATGTTCTTACATGATGATCTTCAATTAAGACAGGCACTCATG 2205

RESULT 15  
US-07-885-970A-25/C  
Sequence 25, Application US/07885970A  
Patent No. 5495070

GENERAL INFORMATION:  
APPLICANT: John, Malivak E.

TITLE OF INVENTION: GENETICALLY ENGINEERING COTTON

NUMBER OF SEQUENCES: 33

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Nicholas J. Seay, Quarles & Brady  
STREET: P.O. Box 2113, First Wisconsin Plaza

CITY: Madison

STATE: Wisconsin

COUNTRY: USA

ZIP: 53701

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible  
SOFTWARE: Microsoft Word

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/885.970A

FILING DATE: 19920518

CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/617,239

FILING DATE: 21-NOV-1990

ATTORNEY/AGENT INFORMATION:  
NAME: Seay, Nicholas J.

REGISTRATION NUMBER: 27,386

TELEPHONE: (608) 283-2478

TELEFAX: (608) 251-5139

INFORMATION FOR SEQ ID NO: 25:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1964 base pairs  
TYPE: NUCLEIC ACID  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Gossypium barbadense  
STRAIN: Sea Island  
IMMEDIATE SOURCE:  
LIBRARY: EMBL ST  
CLONE: SIH6  
US-07-885-970A-25

1

Query Match 13.3%; Score 33; DB 1; Length 1964;  
Best Local Similarity 53.5%; Pred. No. 0.33;  
Matches 69; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 90 TATATCATTCGAAATAGTACAGTATCTTGATCTGACAGACAGTTCATGATCTCT 149

```

Db 1817 TATATGAATCGAATAAATCAACCAACATATATCCAAACAAATAAACAATAAATTCCTT 1758
OY 150 CAAGTGAATFACTACTGCTCTCATCCCAAGAGGAGCCACTCTGAGGAAGTCTTTTGTGTT 209
Db 1757 CAAATACAAAAAGAGGTGCTCTCAAAAGGTAAAAATAATATATGTCTCAAAAGAT 1698
OY 210 AAACCGAGAA 218
Db 1697 ACAATATATA 1689

```

Search completed: October 17, 2002, 11:14:52  
 Job time : 16.9361 secs

**THIS PAGE BLANK (USPTO)**

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame-plus.n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 6.96588 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-14

Perfect score: 427  
Sequence: 1 ACCTGAAGCGCGAATTCAC.....TTGAATAATGCACAGATCTT 248

Scoring table:  
BLOSUM62  
Xgapop 10.0, Ygapext 0.5  
Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODEL=frame+np.model -DEV=xlh  
-O=/cgn2\_1/USPTO.spool/US09049696/unat\_16102002\_115821\_24739/app\_query.fasta.1.13694  
-DB=Issued Patents.AA -QMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0  
-LOOEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=bloms62 -TRANS=human40.cdl  
-LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MILEN=0 -MAXLEN=200000000  
-USER=US09049696 -GCGN1.1.57 -ernat\_16102002\_115821\_24739 -NCPU=6 -ICPU=3  
-NO\_XLPPY -NO\_WMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOC -DEV.TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6 -Fgapext=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELop=6 -DELEXT=7

Database :

1: Issued Patents.AA:\*  
2: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/Backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	427	100.0	228	1	US-08-469-667-9
2	427	100.0	228	4	US-09-224-110-9
3	427	100.0	228	5	PCT-US95-07289-9
4	427	100.0	914	4	US-09-193-562D-28
5	210.5	49.3	902	4	US-09-193-562D-34
6	195	45.7	203	4	US-09-193-562D-3
7	195	45.7	903	4	US-09-193-562D-2
8	190	44.4	903	4	US-09-193-562D-46
9	189.5	44.4	1000	4	US-09-193-562D-30
10	159	37.2	943	4	US-09-193-562D-32
11	69	16.2	283	3	US-08-726-227-1
12	69	16.2	283	3	US-08-826-246-6

13	69	16.2	283	3	US-08-944-495-6	Sequence 6, Appli
14	69	16.2	283	3	US-09-126-640-9	Sequence 9, Appli
15	69	16.2	283	4	US-08-925-588-6	Sequence 6, Appli
16	69	16.2	283	4	US-09-288-292A-9	Sequence 9, Appli
17	66	15.5	166	5	PCT-US95-03866-34	Sequence 34, Appli
18	65	15.2	283	1	US-08-726-227-4	Sequence 4, Appli
19	65	15.1	908	3	US-08-823-110-1	Sequence 1, Appli
20	65	15.1	908	3	US-08-604-298-1	Sequence 1, Appli
21	64	15.0	166	5	PCT-US95-03866-18	Sequence 18, Appli
22	64	14.8	481	4	US-08-617-785-8	Sequence 8, Appli
23	64	14.8	867	4	US-08-617-785-4	Sequence 4, Appli
24	64	14.8	912	4	US-08-617-785-2	Sequence 2, Appli
25	64	14.8	912	5	PCT-US91-09422-19	Sequence 19, Appli
26	64	14.8	915	1	US-08-453-862-2	Sequence 2, Appli
27	64	14.8	915	2	US-08-452-734A-2	Sequence 2, Appli
28	64	14.8	915	4	US-08-617-785-12	Sequence 12, Appli
29	64	14.8	915	4	US-08-176-401B-2	Sequence 2, Appli
30	64	14.8	915	5	PCT-US94-14989-2	Sequence 2, Appli
31	64	14.8	922	4	US-08-617-785-14	Sequence 14, Appli
32	63	14.8	164	1	US-08-318-193-77	Sequence 77, Appli
33	63	14.8	165	2	US-08-955-848A-1	Sequence 1, Appli
34	63	14.8	165	5	PCT-US95-03866-2	Sequence 2, Appli
35	63	14.8	166	2	US-08-628-428-5	Sequence 2, Appli
36	63	14.8	166	2	US-08-628-428-5	Sequence 5, Appli
37	63	14.8	166	2	US-08-628-428-8	Sequence 8, Appli
38	63	14.8	166	2	US-09-106-891-2	Sequence 2, Appli
39	63	14.8	166	4	US-08-172-507-2	Sequence 2, Appli
40	63	14.8	166	5	PCT-US95-03866-36	Sequence 36, Appli
41	63	14.8	195	4	US-08-482-918-44	Sequence 44, Appli
42	63	14.8	195	4	US-09-224-661-44	Sequence 44, Appli
43	63	14.8	196	4	US-08-336-728A-44	Sequence 44, Appli
44	63	14.8	208	4	US-08-836-252A-6	Sequence 6, Appli
45	63	14.8	208	4	US-08-482-918-46	Sequence 46, Appli

## ALIGNMENTS

RESULT 1  
US-08-469-667-9  
Sequence 9, Application US/08469667  
Patent No. 5733748  
GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ  
COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/469,667  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 228 amino acids

```

;      TYPE: amino acid
;      TOPOLOGY: linear
;      MOLECULE TYPE: protein
US-08-469-667-9

```

Alignment Scores:

Pred. No.:	2,61e-52	Length:	238
Score:	427.00	Matches:	82
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	1	Gaps:	0

US-09-049-696-14 (1-248) x US-08-469-667-9 (1-228)

Oy	3	CTGAAGGGGAAATTCACGGGGGAGTCTATTAATGACTGGACAGCTCCGGGAT	62
Db	103	LeuysAlaGluIleHisGlySerLeuIleHisLeuThrTrpThrAlaProGlyAsp	122
Oy	63	GATTATGACCATGGACAGCTCACAAAGTATATCATTCGAATTAAGTACAAATTTGGAT	122
Db	123	AspTrpAspHisGlyThrAlaHisGlyTyrIleLeuArgIleSerThrSerIleLeuAsp	142
Oy	123	CTCCGAGACAGTTCCAATGAAATCTCTCAAGTGAATACTACTGCTGCATCCCAAGGA	182
Db	143	LeuAlaGlyPheLysPheAsnGluSerLeuGluAlaAsnThrThrAlaLeuIleProLysGlu	162
Oy	183	GCCAACTCTGAGGAAGCTCTTTTGTTTAAACACAGAAAAACATTTACTTTGAAAAATGCACA	242
Db	163	AlaAsnSerGluGluValPheLeuPheLysProGluAsnIleThrPheGluAsnGlyThr	182
Oy	243	GATCTT 248	
Db	183	AspLeu 184	

RESULT 2  
HE-09-374-110-0

; sequence 9, Application US/09224110  
: Patent No. 6337195

GENERAL INFORMATION:  
APPLICANT: YU, GU

TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24

ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi.

STREET: 6 Becker Farm Road

STATE: NJ

ZIP: 07068-1739

MEDIUM TYPE: floppy disk  
COMPUTER: IBM PC compatible

```

SOFTWARE: PatentIn Release #1.0, Version #1.30

```

APPLICATION NUMBER: US/09/224,110

CLASSIFICATION:

APPLICATION NUMBER: 08/469,667

ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro Gregory D

REGISTRATION NUMBER: 30,134  
REFERENCE/DOCKET NUMBER: 325800-435

TELEPHONE: 201-994-1700

INFORMATION FOR SEQ ID NO: 9:

```

;      LENGTH: 228 amino acids
;      TYPE:   amino acid
;      TOPOLOGY: linear
;      MOLECULE TYPE: protein
;
US-09-224-110-9

```

Alignment Scores:

Pred. No.:	2.61e-52	Length:	228
Score:	427.00	Matches:	82
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	4	Gaps:	0

US-09-049-696-14 (1-248) x US-09-224-110-9 (1-228)

Qy	3	CTGAAGGGGAAATTCAAGGGGAGCTCATTAATGTGACTTGAGCAGCTCCGTGGGAT	62
Db	103	Leuysalaaugluehlenslglyserleuileansleuthrlrrphrhalaproglyasp	122
Qy	63	GATTATGACATGGAGACAGCTACACAAGTATATCATTTGAAATTAAGTACAAATATTTTGAT	122
Db	123	AspIyrAspnhlsiglythrAlahnlslgtyrllellearglleeserthserlleueasp	142
Qy	123	CTCAGAGCAAGTCATCATGATATCTCTTCAGAGTGAATATCTCTCATCCCAAGGAA	182
Db	143	LeuhtgAspIyrsPheasngluSerleuglnvalasmthrrhralaenuleerPolysglu	162
Qy	183	GCCAACTCTGAGGAAGCTTTTGTGTTTAAACACAGAAAAACATTACTTTGAAATGGCAC	242
Db	163	AlaasnserglugluValaPheleuPheIyrsprogluasnlllethrPhegluaensglythr	182
Qy	243	GATCTT 248	
Db	183	Aspleu 184	

### RESULT 3

Sequence 9, Application PC/TUS955072833

APPLICANT: Rosen, Craig

NUMBER OF SEQUENCES: 24

ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,

STREET: 6 Becker Farm Road

STATE: NJ

ZIP: 07068-1739

COMPUTER: IBM PC compatible  
MEDIUM TYPE: floppy disk

SOFTWARE: PatentIn Release #1.0, Version #1.30

APPLICATION NUMBER: PCT/US95/072895

CLASSIFICATION:

NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36 134

REFERENCE/DOCKET NUMBER: 323800-283

TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744

SEQUENCE CHARACTERISTICS:

TYPE: amino acid





```

; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 3
; LENGTH: 203
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 associated protein from bovine endothelial cells
US-09-193-562D-3

Alignment Scores:
Pred. No.:          2,29e-19           Length:      203
Score:              195.00            Matches:     39
Percent Similarity: 71.43%             Conservative: 11
Best Local Similarity: 55.71%          Mismatches:  20
Query Match:        45.67%            Indels:       0
DB:                  Gaps:              0

US-09-049-696-14 (1-248) x US-09-193-562D-3 (1-203)
QY   33 ATTAATCTGACTTGGACAGCTCCTGGGATATTATGACCATGGAAACGCTCACAGTAT 92
    ||| |:::|||||||:::||||| ||| ||| ||::: |||
    75 IleglnLsestirphrhlapProglYasnValLeuaspIysAlaAsnserTYr 94
    93 ANCATTCGAATAAGTACAAGTATTTGTGATCTAGAGACAGAAGTTCAATGCATCTTCAA 152
    95 IleleargIlleserYsserrhemetAspArgGlndInasppheAspaNalatrHeu 114
QY   153 GTGAATACACCTGCTCCATCCCAAGAAGCCAACTCGTAGNAAGTCTTTTGTTTAAA 212
    |||||:::|||||||:::||||| ||::: ||| ||| |||||
    Db  115 ValasrlThserasnleuilerprolysgluAlaglyserIysgluasnPheglUpheLys 134
QY   213 CCAGAAACATTACTTTGAAAAATGGCACA 242
    |||||:::|||||||:::|||||
Db    135 ProgluhIshearYvalGIuaSnglYTThr 144

RESULT 7
US-09-193-562D-2
; Sequence 2, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 2
LENGTH: 905
TYPE: PRT
ORGANISM: Unknown
FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells
US-09-193-562D-2

Alignment Scores:
Pred. No.:          4.04e-19           Length:      905
Score:              195.00            Matches:     39
Percent Similarity: 71.43%             Conservative: 11
Best Local Similarity: 55.71%          Mismatches:  20
Query Match:        45.67%            Indels:       0
DB:                  Gaps:              0

US-09-049-696-14 (1-248) x US-09-193-562D-2 (1-905)
QY   33 ATTAATCTGACTTGGACAGCTCCTGGGATATTATGACCATGGAAACGCTCACAGTAT 92
    ||| |:::|||||||:::||||| ||| ||| ||::: |||
    Db  777 IleglneusertlrphnlalaProglYasnValLeuaspIysgLyAlaAsnserTYr 796
QY   93 ATCATTCGAATAGTACAGTATTTGTGATCTCAGAGACAGAAGTTCAATGAATCTTCAA 152
    ||| |:::|||||||:::||||| ||| ||| ||::: |||

```

```

Db      797 lIeIIeaRgIlSeSrLySerPheMeLaSPaRgGlInclUnSpRehaSPaSnAlaThLeu   816
QY      153 GTGAATACTGCTGCCTCATCCCAAGAAAGCCAACTCGTAGAAGATCTTTTGTAAAA   212
        |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db      817 ValaSnThrSerAenLeuIlleProLySGlUalaglySerLySGluAsnPhelUnPhelys   836
QY      213 CCAGAAAACATTACTTTTGAAAATGGCACA   242
        |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db      837 ProGUlnHISphearValaGUaSnGLyThr    846

RESULT 8
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithellum (Cunningham et al., 1995, J. Biol Chem., 270:31016-
US-09-193-562D-46

Alignment Scores:
Pred. No.:          2,07e-18           Length:          903
Score:             190.00              Matches:           39
Percent Similarity: 69.01%              Conservative:       10
Best Local Similarity: 54.93%            Mismatches:         22
Query Match:       44.50%               Indels:             0
DB:                4                   Gaps:              0

US-09-049-696-14 (1-248) x US-09-193-562D-46 (1-903)
QY      33 ATTAATCTGACTGCGACAGCTCCTGGGAGTAGTATATGACCATGGAACAGCTCACAAAGTAT   92
        ||| |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db      775 lIegInLseSerrPrThraIProAlaSnValLeuASPlYSGLYLysAlaSnSerrYr   794
QY      93 AATCATTCGAATAGAACAAAGTATTCGTGATCCAGAGACAATTCGAATGAATCTCTCAA   152
        |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db      795 lIeIIeaRgIlSeSrLySerPheLeuAspLeuGlnLYsASPheaspSnAlaThrlEu   814
QY      153 GTGAATACTACTGCTCTCATCCCAAGAAAGCCAACCTGTAGAGAGCTTTTGTAAAA   212
        |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db      815 ValaSnThrSerLeuLYsProLYsGUalaglySerASglUaSnPhelUnPhelys   834
QY      213 CCAGAAAACATTACTTTTGAAAATGGCACAAGT   245
        |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::|||||
Db      835 ProGUlnProPheaRylIegLUaSnGLyThrAsn   845

RESULT 9
US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17

```



```

Db      231 ThrSerLeu-----serAlaIysValAsnAsnAlaSer 241
QY      168 CTCATC 173
          |||||
Db      242 LeuIle 243

RESULT 12
US-08-826-246-6
; Sequence 6, Application US/08826246
; Patent No. 6048709
; GENERAL INFORMATION:
; APPLICANT: Fald, Dean
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
; TITLE OF INVENTION: THE TREATMENT AND DIAGNOSIS OF
; TITLE OF INVENTION: CARDIOVASCULAR DISEASE
; NUMBER OF SEQUENCES: 44
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PENNIE & EDMONDS LLP
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/826,246
FILING DATE: 28-MAR-1997
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/799,910
FILING DATE: 13-FEB-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/011,767
FILING DATE: 16-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: Coruzzi, Laura A
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7853-078-999
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)7909090
TELEFAX: (212)8699741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 283 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-826-246-6

Alignment Scores:
Pred. No.: 0.207 Length: 283
Score: 69.00 Matches: 20
Percent Similarity: 45.16% Conservative: 8
Best Local Similarity: 32.26% Mismatches: 14
Query Match: 16.16% Indels: 20
DBs: 3 Gaps: 2
US-08-049-696-14 (1-248) x US-08-826-246-6 (1-283)
QY      21 GGGGGCAGCTCTC-----ATAATCTGACTTGG 47
          |||||
Db      191 GlyIysSerIleTyrGlnIysValAsnGluIysIleGluThrSerIleAsnLeuAlaTrp 210
          |||||
QY      48 ACAGCTCTCGGGGAGTGAATTATGACCAAGGAACAGCTCAACAAGTATATCATTCGAAATAACT 107
          |||||
Db      211 ThrAlaGlySerAsnAsnThrArgpHeglyIleAlaIalAsyIstyMetLeuAspCysArg 230
          |||||

```

```

01  ACAATATCTTGATCTCAGACAGATGTAATGAACTCTTCAAGAGTACTACTGCT 167
02  |||||
03  231 ThrSerLeu -----SerialValAsnAlaSer 241
04  168 CTCATC 173
05  |||||
06  242 LeuIle 243
07
08  RESULT 13
09  US-08-944-495-6
10  ; Sequence 6, Application US/08944495
11  ; Patent No. 6087477
12  ; GENERAL INFORMATION:
13  ; APPLICANT: Palb, Dean
14  ; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
15  ; TITLE OF INVENTION: THE TREATMENT AND DIAGNOSIS OF
16  ; TITLE OF INVENTION: CARDIOVASCULAR DISEASE
17  ; NUMBER OF SEQUENCES: 44
18  ; CORRESPONDENCE ADDRESS:
19  ; ADDRESSEE: PENNIE & EDMONDS LLP
20  ; STREET: 1155 Avenue of the Americas
21  ; CITY: New York
22  ; STATE: NY
23  ; COUNTRY: USA
24  ; ZIP: 10036-2711
25  ; COMPUTER READABLE FORM:
26  ; MEDIUM TYPE: Diskette
27  ; COMPUTER: IBM Compatible
28  ; OPERATING SYSTEM: DOS
29  ; SOFTWARE: FastSeq Version 2.0
30  ; CURRENT APPLICATION DATA:
31  ; APPLICATION NUMBER: US/08/944,495.
32  ; FILING DATE:
33  ; CLASSIFICATION:
34  ; PRIOR APPLICATION DATA:
35  ; APPLICATION NUMBER: 08/799,910
36  ; FILING DATE:
37  ; ATTORNEY/AGENT INFORMATION:
38  ; NAME: Coruzzi, Laura A
39  ; REGISTRATION NUMBER: 30,742
40  ; REFERENCE/DOCKET NUMBER: 7853-067-999
41  ; TELECOMMUNICATION INFORMATION:
42  ; TELEPHONE: (212)7909090
43  ; TELEFAX: (212)8699741
44  ; TELEX: 66141 PENNIE
45  ; INFORMATION FOR SEQ ID NO: 6:
46  ; SEQUENCE CHARACTERISTICS:
47  ; LENGTH: 283 amino acids
48  ; TYPE: amino acid
49  ; STRANDEDNESS: unknown
50  ; TOPOLOGY: unknown
51  ; MOLECULE TYPE: protein
52  ; FRAGMENT TYPE: Internal
53  ; US-08-944-495-6
54
55  Alignment Scores:
56  Pred. NO.: 0.207 length: 283
57  Score: 69.00 Matches: 20
58  Percent Similarity: 45.16% Conservative: 8
59  Best Local Similarity: 32.26% Mismatches: 14
60  Query Match: 16.16% Indels: 20
61  Gaps: 2
62
63  US-09-049-696-14 (1-248) x US-08-944-495-6 (1-283)
64
65  01  GGGGGCAGCTC-----ATTAATCTGACTTGG 47
66  |||||
67  191 GlyGlySerIleTyrGlnIysValAsnGluTyrSllGluThrSerIleAsnLeuAlaTrp 210
68
69  01  ACACACTCTCTGGGGATGATATGACCAATGGAACAGCTCTACAAGATATATCATTCGAATTAAGT 107
70  |||||
71  211 ThrIleGlySerAsnAsnThrArgPheGlyIleAlaIleAlaIstyrMetLeuAspCysArg 230
72  |||||

```

OY 108 ACAAGTATCTTGATCTGACAGACAGTTCATGATCTCTTCAAGTACTACTGCT 167  
|||||  
Db 231 ThrSerLeu-----SerAlaIysValAsnAsnAlaser 241

OY 168 CTCATC 173  
|||||  
Db 242 LeuIle 243

RESULT 14  
US-09-126-640-9  
; Sequence 9, Application US/09126640A  
; Patent No. 6099823  
; GENERAL INFORMATION:  
; APPLICANT: Falb, Dean A.  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE  
; TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF CARDIOVASCULAR DISEASE  
; FILE REFERENCE: 7853-126  
; CURRENT APPLICATION NUMBER: US/09/126,640A  
; CURRENT FILING DATE: 1998-07-30  
; EARLIER APPLICATION NUMBER: 08/870,434  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 08/799,910  
; EARLIER FILING DATE: 1997-02-13  
; EARLIER APPLICATION NUMBER: 60/011,787  
; EARLIER FILING DATE: 1996-02-16  
; NUMBER OF SEQ ID NOS: 44  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 9  
; LENGTH: 283  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-126-640-9

Alignment Scores:  
Pred. No.: 0.207 Length: 283  
Score: 69.00 Matches: 20  
Percent Similarity: 45.16% Conservative: 8  
Best Local Similarity: 32.26% Mismatches: 14  
Query Match: 16.16% Indels: 20  
DB: 3 Gaps: 2

US-09-049-696-14 (1-248) x US-09-126-640-9 (1-283)

OY 21 GGGGCGAGCTC-----ATTATCTGACTTGG 47  
|||||  
Db 191 GlyGlySerIleTyrGlnIysValAsnGluysIleGluThrSerIleAsnLeuAlaTrp 210

OY 48 ACAGCTCGGGGATGATTATGACCATGGAACAGCTCACAGTATATATTCGATAAAGT 107  
|||||  
Db 211 ThrAlaGlySerAsnAsnThrArgPheGlyIleAlaAlaIysTyrMetLeuAspCysArg 230

OY 108 ACAAGTATCTTGATCTGACAGACAGTTCATGATCTCTTCAAGTACTACTGCT 167  
|||||  
Db 231 ThrSerLeu-----SerAlaIysValAsnAsnAlaser 241

OY 168 CTCATC 173  
|||||  
Db 242 LeuIle 243

RESULT 15  
US-08-925-588-6  
; Sequence 6, Application US/08925588  
; Patent No. 6221628  
; GENERAL INFORMATION:  
; APPLICANT: Falb, Dean  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR  
; THE TREATMENT AND DIAGNOSIS OF  
; CARDIOVASCULAR DISEASE  
; NUMBER OF SEQUENCES: 44  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: PENNIE & EDMONDS LLP  
; STREET: 1155 Avenue of the Americas

CITY: New York  
STATE: NY  
COUNTRY: USA  
ZIP: 10036-2711  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/925,588  
FILING DATE: 08-Sep-1997  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/799,910  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Coruzzi, Laura A  
REGISTRATION NUMBER: 30,742  
REFERENCE/DOCKET NUMBER: 7853-067-999  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212)7909090  
TELEFAX: (212)8699741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 283 amino acids  
TYPE: amino acid  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: protein  
FRAGMENT TYPE: internal  
SEQUENCE DESCRIPTION: SEQ ID NO: 6:  
US-08-925-588-6

Alignment Scores:  
Pred. No.: 0.207 Length: 283  
Score: 69.00 Matches: 20  
Percent Similarity: 45.16% Conservative: 8  
Best Local Similarity: 32.26% Mismatches: 14  
Query Match: 16.16% Indels: 20  
DB: 4 Gaps: 2

US-09-049-696-14 (1-248) x US-08-925-588-6 (1-283)

OY 21 GGGGCGAGCTC-----ATTATCTGACTTGG 47  
|||||  
Db 191 GlyGlySerIleTyrGlnIysValAsnGluysIleGluThrSerIleAsnLeuAlaTrp 210

OY 48 ACAGCTCGGGGATGATTATGACCATGGAACAGCTCACAGTATATATTCGATAAAGT 107  
|||||  
Db 211 ThrAlaGlySerAsnAsnThrArgPheGlyIleAlaAlaIysTyrMetLeuAspCysArg 230

OY 108 ACAAGTATCTTGATCTGACAGACAGTTCATGATCTCTTCAAGTACTACTGCT 167  
|||||  
Db 231 ThrSerLeu-----SerAlaIysValAsnAsnAlaser 241

OY 168 CTCATC 173  
|||||  
Db 242 LeuIle 243

Search completed: October 17, 2002, 17:59:39  
Job time : 8.96588 secs

**This Page Blank (uspto)**

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 : Search time 101.36 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-18  
Perfect score: 2813  
Sequence: 1 GAATTCACAGGAGATGTAC.....AAATTAATCATTCCTTA 2813

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Archived: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_NA.\*  
1: /cgn2\_6/ptodata/2/1na/5A\_COMB.seq.\*  
2: /cgn2\_6/ptodata/2/1na/5B\_COMB.seq.\*  
3: /cgn2\_6/ptodata/2/1na/6A\_COMB.seq.\*  
4: /cgn2\_6/ptodata/2/1na/6B\_COMB.seq.\*  
5: /cgn2\_6/ptodata/2/1na/PTCUS\_COMB.seq.\*  
6: /cgn2\_6/ptodata/2/1na/Backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2807.2	99.8	3007	4	US-09-193-562D-27
2	900.2	32.0	3317	4	US-09-193-562D-1
3	840.6	29.9	3022	4	US-09-193-562D-33
4	832.6	29.6	3418	4	US-09-193-562D-29
5	780.8	27.8	878	1	US-08-463-667-8
6	780.8	27.8	878	1	US-09-224-110-8
7	780.8	27.8	878	5	PCT-US95-07289-8
8	552.2	19.6	2970	4	US-09-193-562D-31
9	323.8	11.5	401	4	US-09-221-298-34
10	228.2	8.1	576	4	US-09-385-982-23
11	221.4	7.9	595	4	US-09-385-982-25
12	200.8	7.1	618	4	US-09-385-982-24
13	183.4	6.5	611	4	US-09-385-982-27
14	168.6	6.0	742	4	US-09-385-982-33
15	95.4	3.4	335	4	US-09-193-562D-14
16	52	1.8	7218	1	US-08-233-463-14
17	38.6	1.4	5156	2	US-09-091-432-3
18	35.6	1.3	4211	4	US-09-004-838-106
19	35	1.2	1794	3	US-09-012-515A-13
20	35	1.2	1794	3	US-08-360-144A-13
21	35	1.2	1794	5	PCT-US95-06722-13
22	34.8	1.2	6924	1	US-08-015-973-2
23	34.8	1.2	6924	2	US-08-448-164-2
24	34	1.2	3600	4	US-08-855-910-7
25	34	1.2	5319	1	US-08-169-927-1
26	33.8	1.2	3447	1	US-08-252-995D-3
27	33.8	1.2	3447	2	US-08-834-108-3

C	28	33.2	1.2	2520	2	US-08-454-557C-50	Sequence 50, Appl
C	29	33.2	1.2	2520	2	US-08-340-426D-50	Sequence 50, Appl
C	30	33.2	1.2	2520	2	US-08-450-673C-50	Sequence 50, Appl
C	31	33.2	1.2	2520	5	PCT-US95-17111A-50	Sequence 50, Appl
C	32	33	1.2	1984	1	US-07-885-970A-25	Sequence 25, Appl
C	33	33	1.2	1985	1	US-08-298-687A-25	Sequence 25, Appl
C	34	33	1.2	1985	1	US-08-298-829-25	Sequence 25, Appl
C	35	33	1.2	2615	1	US-08-072-281-1	Sequence 1, Appl
C	36	33	1.2	2615	1	US-08-759-446-1	Sequence 1, Appl
C	37	33	1.2	2615	4	US-09-027-998A-1	Sequence 1, Appl
C	38	33	1.2	3050	2	US-09-031-442A-21	Sequence 21, Appl
C	39	33	1.2	3050	4	US-09-258-377-21	Sequence 21, Appl
C	40	32.8	1.2	1534	1	US-08-300-903A-6	Sequence 6, Appl
C	41	32.8	1.2	1838	2	US-09-091-432-1	Sequence 1, Appl
C	42	32.6	1.2	2369	2	US-08-910-925-2	Sequence 2, Appl
C	43	32.4	1.2	1117	4	US-09-247-373B-33	Sequence 33, Appl
C	44	32.4	1.2	1423	4	US-08-916-576B-3	Sequence 3, Appl
C	45	32	1.1	430	4	US-08-905-223-235	Sequence 235, App

## ALIGNMENTS

RESULT 1									
US-09-193-562D-27									
Sequence 27, Application US/09193562D									
Patent No. 6309857									
GENERAL INFORMATION:									
APPLICANT: Pauli, Benedicht U.									
TITLE OF INVENTION: Nucleotide sequences Encoding Mammalian Calcium									
FILE REFERENCE: 18617 0052									
CURRENT APPLICATION NUMBER: US/09/193, 562D									
CURRENT FILING DATE: 1998-11-17									
PRIOR APPLICATION NUMBER: US/60/065, 922									
PRIOR FILING DATE: 1997-11-17									
NUMBER OF SEQ ID NOS: 47									
SEQ ID NO 27									
LENGTH: 3007									
TYPE: DNA									
ORGANISM: Homo sapiens									
US-09-193-562D-27									
Query Match									
Best Local Similarity 99.8% Score 2807.2; DB 4; Length 3007;									
Best Local Similarity 99.9% Pred. No. 0;									
Matches 2809; Conservative 0; Mismatches 3; Indels 0; Gaps 0;									
OY	1	GAATTCACAGGAGATGTACAGCATGAGGCGCATTTAGAGTTCTGTTGATCTTGATT	60						
DB	23	GGAATCAGAGGAGATGTACAGCATGAGGCGCATTTAGAGTTCTGTTGATCTTGATT	82						
OY	61	CTTACCTTCTAGAGGGGCGCTGAGTAATCTACTCATTCAGCTGACACAGGCTAT	120						
DB	83	CTTACCTTCTAGAGGGGCGCTGAGTAATCTACTCATTCAGCTGACACAGGCTAT	142						
OY	121	GAGGCGATTTGCTGTCATGATGACCCCAATGCGCAAGATGAAACACTCATTAACAA	180						
DB	143	GAGGCGATTTGCTGTCATGATGACCCCAATGCGCAAGATGAAACACTCATTAACAA	202						
OY	181	ATAAGGACATGTCAGCCAGCATCTGTATCTGTTGAAGCTACAGGAAGCATTT	240						
DB	203	ATAAGGACATGTCAGCCAGCATCTGTATCTGTTGAAGCTACAGGAAGCATTT	262						
OY	241	TATTTCAAAAATGTTGCCATTTTGTCTGTAACATGGAAGACAAAGCTGATGTG	300						
DB	263	TATTTCAAAAATGTTGCCATTTTGTCTGTAACATGGAAGACAAAGCTGATGTG	322						
OY	301	AGACCAAACTTGAGACCTACAAAATGCTGATGTTGCTGATGATACCTACCTCA	360						
DB	323	AGACCAAACTTGAGACCTACAAAATGCTGATGTTGCTGATGATACCTACCTCA	382						
OY	361	GCTATGATGAACCTTACAGTACGACAGTGGCACTGTGAGAGAAAGGTGAAGATC	420						

Db 383 GGTAATGATGAACCCCTACACATGAGCAGATGGCAACTGTGAGAGAGAGGCTGAAGATC 442  
Qy 421 CACCTCAGCTCTGATTTTCATTTGAGAGAAAAAGTTAGCTGAATATGACACAGAGTAG 480  
Db 443 CACCTCAGCTCTGATTTTCATTTGAGAGAAAAAGTTAGCTGAATATGACACAGAGTAG 502  
Qy 481 GGATTTGTCATGAGAGGAGCTACATGAGAGGAGTATTTGACAGATATCAATATGAT 540  
Db 503 GCAATTTGTCATGAGAGGAGCTACATGAGAGGAGTATTTGACAGATATCAATATGAT 562  
Qy 541 GAGAAATTTCTACTTATCCATGAGAGAAATACAGCAGTAAAGATGTTACAGAGTATTA 600  
Db 563 GAGAAATTTCTACTTATCCATGAGAGAAATACAGCAGTAAAGATGTTACAGAGTATTA 622  
Qy 601 GGTACAAATGTAATGAAGAGTGTGAGAGAGAGCTGTTACACCAAAAGATGACATTC 660  
Db 623 GGTACAAATGTAATGAAGAGTGTGAGAGAGAGCTGTTACACCAAAAGATGACATTC 682  
Qy 661 AATAAGTTAACAGAGCTATGAAAAAGATGAGTTGTTCTCCAAATCCCGCAGAG 720  
Db 683 AATAAGTTAACAGAGCTATGAAAAAGATGAGTTGTTCTCCAAATCCCGCAGAG 742  
Qy 721 GAGAGGCTTCTAATATGTTTGACAAACATGTTGATTCATAGTTGAATTCGTACAGAA 780  
Db 743 GAGAGGCTTCTAATATGTTTGACAAACATGTTGATTCATAGTTGAATTCGTACAGAA 802  
Qy 781 CAAACCCACACAAAGAGCTCCAAACAGCAAAATCAAAATGCAATCCGCAAGAC 840  
Db 803 CAAACCCACACAAAGAGCTCCAAACAGCAAAATCAAAATGCAATCCGCAAGAC 862  
Qy 841 TGGAGAGTATCCGCTGATTTGAGAGCTTTAGAAAAACCTCCTATGACACACAGCA 900  
Db 863 TGGAGAGTATCCGCTGATTTGAGAGCTTTAGAAAAACCTCCTATGACACACAGCA 922  
Qy 901 CCAATCCACCTTCTCATTTGCTGACAGATGAGCAAAAGATTTGTGTTTAGTCTTGAC 960  
Db 923 CCAATCCACCTTCTCATTTGCTGACAGATGAGCAAAAGATTTGTGTTTAGTCTTGAC 982  
Qy 961 AATATGAGAGCAATGGGAGCTGGTAACCGCTCAATGATGATCAAGAGGAGAGCTT 1020  
Db 983 AATATGAGAGCAATGGGAGCTGGTAACCGCTCAATGATGATCAAGAGGAGAGCTT 1042  
Qy 1021 TTCTGCTGACAGAGTGTGAGCTGGGGTCTCTGGGTTGGATGTTGACATTTGACAGTCT 1080  
Db 1043 TTCTGCTGACAGAGTGTGAGCTGGGGTCTCTGGGTTGGATGTTGACAGTCT 1102  
Qy 1081 GCCCATATACAAAGTGAACATACAGATAAACAGTGGAGTGAACAGGACACACTGCC 1140  
Db 1103 GCCCATATACAAAGTGAACATACAGATAAACAGTGGAGTGAACAGGACACACTGCC 1162  
Qy 1141 AAAAGATTACCTGACAGAGCTTCAGAGGAGAGCTGCATCTGACAGCGGCTTCGATCGCA 1200  
Db 1163 AAAAGATTACCTGACAGAGCTTCAGAGGAGAGCTGCATCTGACAGCGGCTTCGATCGCA 1222  
Qy 1201 TTTACTGTTGATTAAGAGAAATATCCAACTAGATGATCTGAATTTGTCTGCTGACGGAT 1260  
Db 1223 TTTACTGTTGATTAAGAGAAATATCCAACTAGATGATCTGAATTTGTCTGCTGACGGAT 1282  
Qy 1261 GGGGAAGACAACTATTAAGTGGGTGCTTTAGCAGAGTCAAAACAAATGGTGGCATATC 1320  
Db 1283 GGGGAAGACAACTATTAAGTGGGTGCTTTAGCAGAGTCAAAACAAATGGTGGCATATC 1342  
Qy 1321 CACACAGTGGCTTTGGGGCCCTCTGACAGCTCAAGACATAGAGAGTGTCCAAATGACA 1380  
Db 1343 CACACAGTGGCTTTGGGGCCCTCTGACAGCTCAAGACATAGAGAGTGTCCAAATGACA 1402  
Qy 1381 GGAAGTTTACAGACATATGCTTCAGATCAAGTTCAAGAACATGGCCCTCATTTGATGCTTTT 1440  
Db 1403 GGAAGTTTACAGACATATGCTTCAGATCAAGTTCAAGAACATGGCCCTCATTTGATGCTTTT 1462  
Qy 1441 GGGGCCCTTTTCATAGGAATGAGCTGTCTCTAGCGCTTCATCCAGCTTTGAGAGTAG 1500  
Db 1463 GGGGCCCTTTTCATAGGAATGAGCTGTCTCTAGCGCTTCATCCAGCTTTGAGAGTAG 1522

Qy 1501 GGATTAACCCCTCAGAACAGCCAGTGAATGATGGCACAGTATGTTGGACAGCACCGTG 1560  
Db 1523 GGATTAACCCCTCAGAACAGCCAGTGAATGATGGCACAGTATGTTGGACAGCACCGTG 1582  
Qy 1561 GGAAGGACACTTTTCTTATACCTGAGACACGACGCTCCCAATCTTCTGTGG 1620  
Db 1583 GGAAGGACACTTTTCTTATACCTGAGACACGACGCTCCCAATCTTCTGTGG 1642  
Qy 1621 GATCCAGTGGACACAAAGAGTGGCTTTAGTGGAGCAAAACACCAAAATGGGCTAC 1680  
Db 1643 GATCCAGTGGACACAAAGAGTGGCTTTAGTGGAGCAAAACACCAAAATGGGCTAC 1702  
Qy 1681 CTCCAATCCAGGACTTCTAAGTTGGCACTTGGAAATACAGTGTCAAGCAAGCTCA 1740  
Db 1703 CTCCAATCCAGGACTTCTAAGTTGGCACTTGGAAATACAGTGTCAAGCAAGCTCA 1762  
Qy 1741 CAAACCTGACCTGACTGTCAGCTCCGCTCCATGCTACCTGCTCCAAATTACA 1800  
Db 1763 CAAACCTGACCTGACTGTCAGCTCCGCTCCAAATGCTACCTGCTCCAAATTACA 1822  
Qy 1801 GTGACTTCCAAAACGAAAGACACCAAGATCCCAATTCGAGCCCTGTAGTTATGCA 1860  
Db 1823 GTGACTTCCAAAACGAAAGACACCAAGATCCCAATTCGAGCCCTGTAGTTATGCA 1882  
Qy 1861 AATATTCGCAAGAGAGCTCCCAATTCAGAGGCGCAGTGTCAAGCCCTGATTAATCA 1920  
Db 1883 AATATTCGCAAGAGAGCTCCCAATTCAGAGGCGCAGTGTCAAGCCCTGATTAATCA 1942  
Qy 1921 GTGATGAAAAAAGACTTCTTTGAGAACTACTGATTAATGAGAGAGTGTCTGATCT 1980  
Db 1943 GTGATGAAAAAAGACTTCTTTGAGAACTACTGATTAATGAGAGAGTGTCTGATCT 2002  
Qy 1981 AAGATGAGGAGTGTCTACCAAGATTTTACAACTTATGACACGAATGATGATACAT 2040  
Db 2003 AAGATGAGGAGTGTCTACCAAGATTTTACAACTTATGACACGAATGATGATACAT 2062  
Qy 2041 GTAAAAAGTGGGCTCTGGAGAGATTAAACGACGACGAGAGATTAACCCAGCAG 2100  
Db 2063 GTAAAAAGTGGGCTCTGGAGAGATTAAACGACGACGAGAGATTAACCCAGCAG 2122  
Qy 2101 AGTGGAGCACTGTACATACCTGCTGATTTGAGAAATGAGAAATACAAATGCAACGA 2160  
Db 2123 AGTGGAGCACTGTACATACCTGCTGATTTGAGAAATGAGAAATACAAATGCAACGA 2182  
Qy 2161 AGACCTGAATTAATTAAGATGATGTTCAACACAAAGAGTGTTCAGCAAGACATCC 2220  
Db 2183 AGACCTGAATTAATTAAGATGATGTTCAACACAAAGAGTGTTCAGCAAGACATCC 2242  
Qy 2221 TGGGAGGCTCATTTGCTGTGATGTCCAAATGCTGCCATACCTGATCTCTTCCCA 2280  
Db 2243 TGGGAGGCTCATTTGCTGTGATGTCCAAATGCTGCCATACCTGATCTCTTCCCA 2302  
Qy 2281 CCTGGCCCAATTCACCACTCGAAGGGGAAATTCAGGGGGGCGTCCATTAATCTGACT 2340  
Db 2303 CCTGGCCCAATTCACCACTCGAAGGGGAAATTCAGGGGGGCGTCCATTAATCTGACT 2362  
Qy 2341 TGGACAGCTCTGGGGATGTTATGACATGGAAGCTTCACAAATATCATTCGAATA 2400  
Db 2363 TGGACAGCTCTGGGGATGTTATGACATGGAAGCTTCACAAATATCATTCGAATA 2422  
Qy 2401 AGTACAAATTTCTTGATCTCAGACAGACAGTTCAATGAATCTTTCAAGTGAATACT 2460  
Db 2423 AGTACAAATTTCTTGATCTCAGACAGACAGTTCAATGAATCTTTCAAGTGAATACT 2482  
Qy 2461 GCTCTATCCCAAGAGAGCAACTCGAGAGTCTTTTGTAAACAGAGAAACAT 2520  
Db 2483 GCTCTATCCCAAGAGAGCAACTCGAGAGTCTTTTGTAAACAGAGAAACAT 2542  
Qy 2521 ACTTTGAAATGGAACAGATCTTTTCATGCTATTCAGGCTGTGATTAAGTGCATCTG 2580  
Db 2543 ACTTTGAAATGGAACAGATCTTTTCATGCTATTCAGGCTGTGATTAAGTGCATCTG 2602



Qy	2561	AAATCAGAAATATTCACACATTTGGACAGAGATCTTGTGTTATTTATTCCTCCACAGACTCCGCA	2640
Db	2603	AAATCAGAAATATTCACACATTTGGACAGAGATCTTGTGTTATTTATTCCTCCACAGACTCCGCA	2662
Qy	2641	GAGACACCTATGTCCTGATGAAAGCTGTGCTTCCTGCTCAATATTCATATCAAGAGACC	2700
Db	2663	GAGACACCTATGTCCTGATGAAAGCTGTGCTTCCTTCCTCAATATTCATATCAAGAGACC	2722
Qy	2701	ATTCCTGGCATTCACATTTTAAAAATTTATGTGAACTGGATAGAGAACTGCAGCTGCA	2760
Db	2723	ATTCCTGGCATTCACATTTTAAAAATTTATGTGAACTGGATAGAGAACTGCAGCTGCA	2782
Qy	2761	ATACCCTAGGCGTGAATTTTGTCAATATAATTAATAATCATTCATCCCTT	2812
Db	2783	ATACCCTAGGCGTGAATTTTGTCAATATAATTAATAATCATTCATCCCTT	2834

```

SEQUENCE 2
US-09-193-562D-1
Sequence 1, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedict u.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 1
: LENGTH: 3317
: TYPE: DNA
: ORGANISM: Unknown
: FEATURE:
: OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated
: OTHER INFORMATION: protein from bovine endothelial cells
US-09-193-562D-1

```

Query Match	32.0%: Score 900.2; DB 4; Length 3317;
Best Local Similarity	61.4%: Prid. No. 2.1e-267;
Matches 1635; Conservative	0; Mismatches 978; Indels 48; Gaps 10;
OY 5 TCACAGGAGATGTACACCAATGGGGCCATTAAAGTTCGTGTTCATCTTGATTTCTC 64	
43 TTACTGTAACTGTGCCAAAAATGGTGTCTGTGTGAATGTATTTCTGTTCCAACTTTGC 102	
OY 65 AACTCTGAAGAGGGGCCCTGAGTAATTACTCATTTACAGTGAACAACAATGGCTTGTAG 124	
Db 103 ATCTCTCCCTGG--AAATGAAATGTTAAATGGTAAATTTGTTTAAACAATGGGTGTGATG 159	
OY 125 GCATTGTGGTTCGAATCGACCCCAATGTGCCAGAAGATGAACACTCTTCAACAATAA 184	
Db 160 GCATTGTGATTGCAATTAAACCCCACTGTGTGCCAGAAAGATGAATAAATCAATGTGAACACATRA 219	
OY 185 AGGACATGGTGACCCAGCAGCATCTCTGTATCTGTGTTGAAGTACAGAAAGCGATTTATT 244	
Db 220 AGGAATATGGTAACTGAACCTTCTACTTCCCTGTTCATCTGACCAACCAAGAGAGTTATT 279	
OY 245 TCAAAATATGGTCCATTTTGTATTCCTGAAACAATGGAACAAAGGCTGTGATGTGAGAC 304	
Db 280 TCAGGAATGTGAGCATTTTAAATTCATGACCTGGAAATCAAAATCTAGTACTTCATAC 339	
OY 305 CAAAATTGAGACCTACAAAAATGCTGATGTTGTGGTGTGAGTCTACTCCTCCAGGTA 364	
Db 340 CAAAACAAGAAATCATATATGACCAAGCAGATGTCAATGTTCAATCCATCTTAATAATATG 399	
OY 365 ATGATGAACCTTACACTGAGCAGAGGGCACTGTGGAGAGAAAGGTGAAGAGATCCACC 424	
Db 400 GAGATGATCCCTATACACTTCAATATGGAAGGTGGGAGAAAAAGAAAATATATATCAATT 459	
OY 425 TCATCTCGATTTTCATTCAGAGAAAAAGTTAGCTGATATGACACACAAGGTAGGCAT 484	

Db	460	TTACTCCAAACTTTCTGTGTGACTAATTAATTTCCATCATCTATGGGTCCGAGCCAGACAGTAT	519
Oy	485	TTGTGCATGAGTGGGCGTCATCTACGATGAGGGAGTATTTGACGATCAATTAATGATGAGA	544
Db	520	TTGTCTCATGAGTGGGCCCATCTCCGCTGGGGAAATATTTGATGATTAATGTGGACACGC	579
Oy	545	AATTCCTACTATTC - - AATGGAAGAATACACAGTAGATGTTCCAGCAGGATATTACTG	601
Db	580	CATTCTAATTTCCAGAAAGAACATCTTAGAACCAACAAAGATGTTCACTCATATTACTG	639
Oy	602	GTACAAATGTG - - TTAAGAAGTTCAGGGAGCGACTGTTACACCAAAAGATCCACAT	658
Db	640	GTATTAAATGTGTTTCCAGAAATGCCCTGGAGCGAGCTGTAATACAACTCATCTACAGAC	699
Oy	659	TCAATAAAGTAAAGGAGCTCATGAAAAAGAGATGATGTTGTCTCCAAATCCGCCGAGA	718
Db	700	GTGACTCCAGACAGCGGCTGATTAAGAACAAATGATACATTTCTTCCAAAAAATATCCGAGA	759
Oy	719	CGGAGAAAGCTTCTAATGATGTTTGACACACATGTTATTTCTATGTTGAATTCGTACAG	778
Db	760	CTGCAAGAGATCCATTAATGTTTATATGCGAAGTCCCATTTCTGAGACTGAATTTGTACAG	819
Oy	779	AACAAACCCACACAAAGAAAGCTCCAAACAGCAAAATCAAAAATGCAATCTCCGACGA	838
Db	820	AAAAAACACACAATACAGAAAGCTCCAAACCTCAAAACAAAATGTGCAATGCGCAAAACGA	879
Oy	839	CATGGGAAGTATCCGATGATTTCTGAGAGACTTTAAGAAAAACACTCCTATGACA - - - - A	892
Db	880	CATGGGAAGTATATCATGATCACTCTGTGGAATCTTCAGATACATCTCCACAGACAAATGA	939
Oy	893	CACAGCCACCAATCCCAACCTCTCATGCTGTGAGATTTGACAAAGAAATGTGATTTAG	952
Db	940	ATCCACCGACTCATCTCATTTTCAATTTGCTCAAGTCCCAAACGCGGATGATCTGTTGG	999
Oy	953	TCTTTGACAAATCTGGAAGCATGGCGACTGTAACCGCTCATGACTGATTAATCAAGCAG	1012
Db	1000	TACTTGATTAATCTGGAAGCATGTGCGAAGAACCGCTCTCTTCCAAATGAATCAAGCAG	1059
Oy	1013	GCCAGCTTTCTCTCTGCGACAGCATGGAGTGGGGTCTGGGTTGGGATGGTGACATTTG	1072
Db	1060	CAGAACTATACCTTATTTCAAGTTAATGAAGAAAGGAACTTTAGTGGGAGGTTCATATTG	1119
Oy	1073	ACAGTGCAGCCATGTACAAAGTGAATCTATACAGTAAACAGTGGCAGTGCAGGAGACA	1132
Db	1120	ACAGTGTTCGTAATCCAAAATCATCTAACAAAGATTAATCTGATGATATGTTACCAA	1179
Oy	1133	CACTCGCCAAAAGTTACCTGCAGCAGCTTCAGAGGAGCTCCATCTGCAGCGGGCTTC	1192
Db	1180	AGATCACCGCAAAACTCCCTCAGATAGCTAATGTTGGAATCTCAATTTGTAAAGGGCTCA	1239
Oy	1193	GATGGCATTTACTGTGATTAAGAAAG - - AATATCCACTGATGATCTGAAATTTGCG	1249
Db	1240	AAGCAGAGTTCCAGGCAATTTATCCACAGTACCAGATGACTTCTGTGTTTGAATCAATC	1299
Oy	1250	TGCTGACGATGGGGAGAGACACATATAAGTGGGTCTTTAAGCAGAGTCAACAAATGTG	1309
Db	1300	TATTTACTGATGGGGAAGATATATGAATTAATTTCAATGCTTTGAGGATGTGAAAACGAATG	1359
Oy	1310	GTGCGCATATCCACACAGTGCCTTTGGGGCCCTCTGCAGCTCAAGAACTAGAGAGACTGT	1369
Db	1360	GTGCAATCATCCACACCATCTGTCTGGAGACCTCTGCTGCCAAAACAGTGGAGACATTTG	1419
Oy	1370	CCAAAATGACAGAGGTTTACAGACATATGCTTCAGATCAAGTTTCAGAAACATGGCCCTCA	1429
Db	1420	CAAAATATGACAGGAGGATATCGTTTTTTTCCAAATTAACATTA - - - - ACTGCGCTTA	1473
Oy	1430	TTGATGCTTTGGGGCCCTTCAATCAGGAATGAGACCTGTCTCCAGCGCTCATCCAGC	1489
Db	1474	CTAATGCTTTCAGTGAATTTCTCTAGAAATGAGAGCATCACTACGACGGCTATTTCACT	1533
Oy	1490	TTGAGAGTAAGGATTAACCTTCAGAACAGCCAGTGAATGATGCAAGATGATCGTG	1549

D	b	1534	TGGAAGCAAAACCTTGAAAAATTACAGGAAGAAGAAAAGATTAAGGGCACAAGTGCCTGTAG	1593
O	y	1550	ACAGACCAGCGTGGGAAAAGGACACTTTGTTCCTTATCACCTGGACAACGAGCCGCCGAAA	1609
D	b	1594	ACAGTACAGTTGGAAATGACACTTCTCTGTGTGCACATGACATFACAAAACACAGAAA	1653
O	y	1610	TCCTCTCTGGGATCCCATGTGGACAGAAC-----AGTGGCTTTGTAGTGGACA	1660
D	b	1654	TTGTTCCTCCAGATATCCAAAAGGAAAAGAAATATAAACCCTGGATTTCAAAMAAATAGT	1713
O	y	1661	AAAACACAAAATGGCCCTACCTCCAAATCCAGGCATTGGCTTAAGGTGGCACTTTGGAAT	1720
D	b	1714	TAAATATTCGATCTGCTCGTGTGCAAACTCGGTATGTACAGACAGAGTACTTGGACTT	1773
O	y	1721	ACAGTCT-----GCAAGCAGCTCCAAACCTTGACCCCTGACTGTCAAGTCCCGTG	1771
D	b	1774	ACAGCTCTTAAATTAATCATGCGCAGCTGTCCAATGGTAAAGTAGACAGTACACTGAC	1833
O	y	1772	CGTCCAAATGCTACCCGTGCTCCAAATTACAGTGACTTCCAAAACGAACAGACACAGCA	1831
D	b	1834	CAGAAATCCTCACTACTACCCCCAGTAATTCGAAACAGCTCACATGAGTCAACATACAGAC	1893
D	b	1832	AATTCGCCAGCCCTCGTGTAGTTATGCAAAATATGGCCAAAGACCTCCCACATTCGA	1891
D	b	1894	ATTATCTAGCCCAATGATGTTTATGACACAGTCAAGTCAAGGTTTTTGCCTGTACTGG	1953
O	y	1892	GGGCCAGTGTACAGCCCTGATTAATCAGTAGAATGGAAGAAAAGTACTCTTGAACATAC	1951
D	b	1954	GAATCAGTGTAAATAGCCATTATAGAAACCGAAGATGACATCAATTAACATTTGAGCTCT	2013
O	y	1952	TGGAATATGACAGCGTGTGATGTACATGAAGATGACGCTGTACATCAAGATATTCA	2011
D	b	2014	GGGCAATGGTGCAGGTCTGGAATACGTCAAGAGATGATGGCAATCACTCAAGATCTTGA	2073
O	y	2012	CAACTTATGACACGAATGTAGATACAGTATAAATGGGCGCTCTGGGAGGAGTTAACG	2071
D	b	2074	CAGATTACTATGGAATATGATGATACAGTTTAAAGTACATGCACAGGCAAGAAACACA	2133
O	y	2072	CAGCCAGACGAGAGTATACCCACAGAGTGGAGCACTGTACATACCTGGCTGATGTG	2131
D	b	2134	CGGCTAGGCTAAATTTAAGACAACACAGAAACAAATGTTCTATATGTCAGGCTACGTTG	2193
O	y	2132	AGATGATGAATACATGGAATCCACCAAGACCTGAATTAATAGATGATGTTCAAC	2191
D	b	2194	AAAAGCGTAAATTTATCTACAGCCACCCAGACCTAAGTCAAAAGTGAACCTGGCAAAAG	2253
O	y	2192	ACAAGCAAGTGTGTTGAGGAGAAACATCCGCGGAGGCTCATTTGGGCTGTGATGACC	2251
D	b	2254	CTTAAATATGAAGACTTTAGCAGCACTACTGTGAGAGGTCAATTTACTGTATCAGAGCTC	2313
D	b	2252	CAAAATGCTCCA---TACTGTATCTGTCCCACTGGCCAAATTCACCGCATGAAAGCGG	2308
D	b	2314	CTCCTCCGTGTAATCAACCCCTTGTGTGTCCACCCAGTAAATTTACAGATCTGTAGGCTA	2373
O	y	2309	AAATTCACGGGGSCAGTCTCATTAATCTGACTTGGACAGCCTCCTGGGAGTATATGACC	2366
D	b	2374	AGTTCAAGAAG--ATTATATTCACATTTCATGGACACCCCTGGCAATGCTCAGATA	2430
O	y	2369	ATGGAACGCTCACAGATATATCATTCGAAATAGTCAAGTATFTCTGATCTCAGAGCA	2428
D	b	2431	AAGGAAAAGCCACACAGCTTATTAAGATTAAGTAAGTAGATTTCATGAGTGTCTCAAGAG	2490
O	y	2429	AGTTCAATGAATCTCTCAAGTAATACTACTGCTCTCATCCCAAGAGACCAACTGTG	2488
D	b	2431	ATTTTGACAAATGCACACTTTAGTGAATCTCTAATCTAATACCTAAGAGGCCGGAATCA	2550
O	y	2489	AGGAATGCTTTTGTTTAAACGAGAAAACATTACTTTGAAATGGCACAGATCTTTTCA	2548
D	b	2551	AAGAAAATTTGAATTTAAGCCAGAACATTTTAGATAGAAAATGGCACAAATCTATA	2610
O	y	2549	TTTGCTATTACAGGCTGTGATTAAGTGTGATGTGAATACAGAAATATCCAACTTGCACAG	2608
D	b	2611	TTTTCAGTCCAAAGCCATCAAGAGCCAAATCTCATCTCCAGAGGTTTCTCATATTGTACAG	2670

QY	2609	TATCTTTTGTATTCCTCCAC	2609
DB	2671	CAATCAAAATTTATTCCTCTAC	2691
RESULT 3			
US-09-193-562D-33			
; Sequence 33, Application US/09193562D			
; Patent No. 6309857			
; GENERAL INFORMATION:			
; APPLICANT: Pauli, Benedicht U.			
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium			
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules			
; FILE REFERENCE: 18617.0052			
; CURRENT APPLICATION NUMBER: US/09/193,562D			
; CURRENT FILING DATE: 1998-11-17			
; PRIOR APPLICATION NUMBER: US/60/065,922			
; PRIOR FILING DATE: 1997-11-17			
; NUMBER OF SEQ ID NOS: 47			
; SEQ ID NO 33			
; LENGTH: 3022			
; TYPE: DNA			
; ORGANISM: Mus musculus			
US-09-193-562D-33			
QY	91	TCACATTCATTCAGCTGACACAAACAAATGGCTATGTAAGGCAATGTCGTTGCAATGCAGCCCAAT	150
DB	81	TCCATGGTGCATCTCAACAGCAATGGATACGAGGGTGTGTCATTCGCCATTAAACCCAGT	140
QY	151	GTGCCAGAAAGATGAAACACACTCTTCAACAATAAAGAGACATGTACCCAGGACTCTCG	210
DB	141	GTGCCAGAGGAGAAAGGCTCATCCCAAGCATTAAGAAATGTATCACTCAAGCTTCTAC	200
QY	211	TATCTGTTTGAAGCTACAGAAAGCGATTTTATTTCAAAAATGTTGCCATTGTTGATTCCT	270
DB	201	TACCTGTTTGAAGCCAGCCCAAGAAAGATTTTTCAGAAACATAGCATATTACTCCG	260
QY	271	GAAACATGGAACACAAGGCTGACTATGTAGAGACCAAAACCTTGAGACCTACAAAATGCT	330
DB	261	ATGACCTGGAATCGAAATCTGAGTACTTAAGCCAAAACGAAATCGACACAAAGCA	320
QY	331	GATGTTTGTGCTGCTGAGTCTACTCTCCAGTATGATGAAACCCATACAGAGATG	390
DB	321	GACGTCATATGTTGGCGATCTCTCCTCGCAACATGAGAGACGCCCTACCCCTTAGTAT	380
QY	391	GGCACCTGTGAGAAAGGGTGAAGAGATCCACTCACTCTCGATTTGATTCAGAGAAA	450
DB	381	GGACAGTGTGGGGACAGAGAGACATGACATCACTTCCACTCCAACTCTCTACTGAT	440
QY	451	AAATTAGCTGAATATGACACAGAAGTGAAGGCAATTTGTCATGAGTGGGCTCATACGA	510
DB	441	AACTTGGCTATCTATGAGACCCGAGGACAGTCTTGTGTCATGAGATGGGCCCATCTCCGG	500
QY	511	TGGGAGATTTTACAGAGTACAAATATGATGAGAATCTACTTTTCA -- ATGGAAGA	567
DB	501	TGGGGAGTATTTGATGAGATTAACGTGGACGGGTCACTTATATTCTTGAAGAAACACT	560
QY	568	ATACAGACAGTAAAGTGTTCACAGAGTATTTACTGGTACAAATGTTAGTAAAGAGTGTAC	627
DB	561	ATAGGAACACAGAGTGTCTCCGCGACATCAAGGCAAGAAAGTGTCCAGAGTGTAC	620
QY	628	GGAGGACAGCTGTACACCAAAAGATGCACATTTCAATTAAGTAAACAGAGCTTATGAAAA	687
DB	621	ACAGGACAGCTGTGTACAAAGGGCTGCGCGCTGACTCGAAGACACGCGCTGATGAACCC	680
QY	688	GGATGTGATTTGTTCTCCAATCCCGCCAGAGAGAAAGGCTTCAATATATGTTTGACAA	747
DB	681	AAATGTACTTTTATCCACAAATAATGTAGACAGTGTGGGGCCCTCCATATATGTTTACGA	740

QY	748	CATGTTATCTTATAGTGAATTTCTGTACAGAAACAAACCAACAAAGAGCTCAAC	807
Db	741	AACTCAATTCCTGTGGTTGAATTTTGCACAGAAAATTAACCAATATGCAGAACCCCAAC	800
QY	808	AAGCAAAATCAAAAATATGCAATCTCCGAAGCACATGGGAAGTATCCGATTTCTGAGAC	867
Db	801	CTACAAACAAAATATGTCATCTGCCAGACAGACGTGGATGTAAATCAAGACGCTCTGAC	860
QY	868	TTTAAAGAAAACCACTCTATG-----ACAACACAGCCACCAATCCCACTTCTCANTG	921
Db	861	TTTTCAGATCCCTCCCAAGAGAGAGAAAGGCCCTCCCTCCACATCAATTTATCTG	920
QY	922	CTCGATGTTGGACAAAGAATTTGTGTTTAAGTCCTTGACAATTCGGAAGCATGGCGACT	981
Db	921	CTCAAGTCCAGAAAGCGAGGTGTGTCTGTGCTGTGATTAATCTTGGAAGCATGACAA	980
QY	982	GCTAACCGCTCAATGCACTGAATCAAGACGCCACCTTTCTCTGTGACAGCACTGAG	1041
Db	981	GAAACCGCTTATTCGAAGAATCAAGACGAGAACTTACTTAACCAATTTGTGAA	1040
QY	1042	CTGGGGTCCGGGTGGGATGATGACATTTGACATGACAGTCCGCCATGTACAAAGTAATC	1100
Db	1041	AAGAGTCATGTTGGATGATTAGTCACATTTGACAGCGCTCCCAATCCAAATTAATCTA	1100
QY	1102	ATACAGATTAACAAGTGGCAGTGCAGAGGACACACTGCCAAAGAATTAATCTGCACAGCT	1161
Db	1101	ATTAATAATACGATGATGATGACTACACAAAGATCACCGCAACCTCCCAACAGCT	1160
QY	1162	TCAGAGAGGACATCTCTGACAGCGGCTTCGATCGGCACTTACTGTGATTA--GGAG	1218
Db	1161	TCGTGTGAACCTTCATATTTGCCATGTGACATCCAGGACGATTTTCAAGCAATTAACCTCCAGT	1220
QY	1219	AAATATCACTATGATGGATGTGAATTTGCTGTCTGACAGATGGGGAAGACAACTATA	1278
Db	1221	GACCAAGACACTTCGGTTCTGATGATCTGATTTCTGACAGATGGGGAAGATTAATGAAATA	1280
QY	1279	AGTGGTGTCTTAAACGAGTCAAAACAAGTGTGCCATATCCACACAATGCGCTTTGGG	1388
Db	1281	CGTTCCGCTTTGAGCGCGCTCTCCACAGCGGTGCATATCACACATGCTCTGGGG	1340
QY	1339	CCCTCTCAGCTCAAGAACTAGAGGAGCGTCCAAAATATCAGAGAGGTTTACAGACAT	1398
Db	1341	CTTTCGCGTGTCCGAGACATGCGAGACTCTGTGCGACATACAGAGGCGCTTGTTCTAT	1400
QY	1399	GCTTCAGATCAAGTTGAGAACAATGGCTCATTTGATGCTTTTGGGCGCTTTCATCAGCA	1458
Db	1401	GCCAAACAAACCT-----AAACAGCTTATTCGATGCTTTCAGTAATTAATCATCTACA	1454
QY	1459	AATGAGACTTCTCTCAGCGCTCATCTCCAGCTTGAGAGTAAAGGATTAACCTCCAGAC	1518
Db	1455	AGTGGACGCTCTCCAGCGGTCTGACAGTTGGAGAGCAAAAGCCTTGATGTGAGACA	1514
QY	1519	AGCCAGTGTGATGGCAGATGATCGTGTGAGACAGCGTGGGAAAGACACTTGT	1578
Db	1515	GGGGCATGATTAACGCTATAGTACTCTGTGACATGACCTGTGGCAAGCACAGTCTT	1574
QY	1579	CTTATCACTGTGACACGACGCTCCCAATCTCTCTGTGGATCCAGTGTGACAGAG	1638
Db	1575	GTTATCACTCGGATGTGTAATAAAAGCCAGAAATCATCTTCAAGATCCAAAAGGAAAAA	1634
QY	1639	CA-----AGTGGCTTTGTAGTGGCAAAAACACCAAAATGGCCACTCCCAATC	1689
Db	1635	TATACAACTCAGATTTCCAAAGTATATACTTAACATCCGCTGTGATGACTTCAATA	1684
QY	1690	CCAGGATTCCTAAGTTGGCACTTGGAAATACG---TCTGCAAGCAAGCTCACAAAC	1746
Db	1695	CCGGGCACTGACAGACAGTAGTACTTGGACTTACAGCTACACGGATACCAAGTCTAGTG	1754
QY	1747	TTGACCTGACTGTACAGTCCGCTGTGCTCAATGCTATACCTGCTCAATTACATGACT	1806
Db	1755	ATTACAAATGACGTGACCACTCGACGAAAGATCCCAACATGAAACACTCTGTGGCTAC	1814

Oy	1807	TCGAAACGAAACGAGACACACCAATTCGCCAGCCCTCGTGGTATTATGCAAAATTT	1866
Oy	1807	TCGAAACGAAACGAGACACACCAATTCGCCAGCCCTCGTGGTATTATGCAAAATTT	1866
Db	1815	TGCTACATGAGTCAGAGACACAGCCCGATACCTAGCCGATATGTGTAGCGACGGGTC	1874
Oy	1867	CGCCAAAGAGCGCTCCCAATTCACAGGCGCAGTGTACACGCCCTGATTTGAATCACTGAT	1926
Db	1875	AGCCAAAGATTTTGTGCTGTCTGGGAGCCAAATGTGCAGAGCCCTCATAGAAAGCTAAT	1934
Oy	1927	GGAAAAACAGTTTACCTTGGAACTACTGATATATGAGCAGGTGCTGATCTACTAAGAT	1986
Db	1935	GGACATCAAGTCACCTTGGAGCTCTGGGACAAATGGGGCAGGTGCTGATATCGTTAAAT	1994
Oy	1987	GAGCGTGTACTACAGCTATTCACACACTTATGACACGAATGGTATGATACGTTAAAT	2046
Db	1995	GATGGCATCTPACACAAATATCTTTACAGATATCATATGAAATGGTATGATACGCTTAA	2054
Oy	2047	GTCGGGCGCTGGGAGGAGTAAACGACAGCAGAGGAGTATACCCAGCAGAGTGA	2106
Db	2055	GTCGGTGTCCAGGACACAAATAAACCAACAGCTAGCTTAAGH---CAGAAGACAG	2111
Oy	2107	GCACGTACATACCTGGCTGGATTGGAAATGATGAATACAAATGGAATTCACACAGACT	2166
Db	2112	TCTTATATATACCTGGCTGTGTGAAAAATGTACTGAATTCACACCCAGACCA	2171
Oy	2167	GAAATTAATAGATATGTTTCAACACAAAGCAAGTGTTTTACAGAAATCCTCGGGA	2286
Db	2172	GATGTCCAAAGAAAGCAATAGAAAGTACAGTGAAGACTTACACAGATTAACCTTGGA	2231
Oy	2227	GGCTCAT---TGAGGCTTGTGATGTGCCAAATGTCCCATACGTGATCTCTCCACT	2283
Db	2232	GGGTCTGTACTGTGTCTGAGAGGCCCCCTGATAGGCGACACAGCTGTGTCTCCACCA	2291
Oy	2284	GGCCAAATCACCGACTGAAGGGGAAATTCACGGGGGCACTGTATTAAATCGACTGG	2343
Db	2292	AGTAAAGTCACAGAGCTGAGGCTGAGTTATAGTG---ATTATATTCACCTTACATGG	2348
Oy	2334	ACACACTCTGGGGATGATTTATGACATCGAAGCAGCTCACAAATATATCTTGAATAGT	2403
Db	2349	ACGGCCCCCTGGCAAGGTTCTCGCAATGGAGAGCCATAGTATCATCATCGAATGAGC	2408
Oy	2404	ACAAGTATTTCTGATCTCAGAGACAGATTCATGATCTCTCAAGTAAATCTACTGCT	2463
Db	2409	CAGATCTCTGTGATCTCCAAAGATTTTAAATAGCTACTTTAGTGAATCTCCAGT	2468
Oy	2464	CTCATCCCAAGAGGCCAATCTGAGGAAGTCTTTTGTTTAAACGAAAAACATTACT	2523
Db	2469	CTGATACCTAAAGAGCTGCTCAAAAAGCATTTAAATCAACCAGAAACCTTTAA	2528
Oy	2524	TTTCAAAATGGCACAGATCTTTTCAATCTGATTTACAGGCTGTGTGATAGGTGCATGAA	2583
Db	2529	ATACCAATGGCACCTCGCTCTCATATGCAATCCAGGCGAGCAATGAAGCCAGTCTCAC	2588
Oy	2584	TCGAAATATCAACATGTCAGACAGTATCTTGTATTATCTCCACA	2630
Db	2589	TCTAGGTCTCAACATGCGACAGGCTGTCAAGCTTACTTCTTACA	2635
RESULTS			
US-09-193-562D-29			
Sequence 29, Application US/09193562D			
Patent No. 630857			
GENERAL INFORMATION:			
APPLICANT: Pauli, Benedicht U.			
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium			
FILE REFERENCE: 18617.0052			
CURRENT APPLICATION NUMBER: US/09/193,562D			
PRIOR APPLICATION NUMBER: US/60/065,922			
PRIORITY FILING DATE: 1997-11-17			
NUMBER OF SEQ ID NOS: 47			
SEQ ID NO 29			
LENGTH: 3418			

```

; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-193-562D-29

Query Match      29.6%; Score 832.6; DB 4; Length 3418;
Best Local Similarity 59.9%; Pred. No. 1.5e-246;
Matches 1603; Conservative 0; Mismatches 979; Indels 93; Gaps 9;

OY 46 GTGTCATCTGTGATCTCTTCACCTTCTAGAGGGGCCCTAGATTAATTCACCTATTCAGCTG 105
Db 37 GTGATTCCTCTCTTCTATCTCTGCTTCTGCGCCGTGATTTGAAAAGCTCACTGTGAACCTTTG 96
OY 106 AACAAATATGCTATGAGGATTCCTGTCATGAGCCCAATGTCAGAAAGATGAA 165
Db 97 AATTAACATGATATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 156
OY 166 ACATCTATTCACAAATTAAGGACATGATGATGATGATGATGATGATGATGATGATGATGAT 225
Db 157 AACTCTATTCACAAATTAAGGACATGATGATGATGATGATGATGATGATGATGATGATGAT 216
OY 226 ACAGAAAGCGATTTATTTTCAAAATGTTGCCATTTTGTCTGTAAGATGGAAGACA 285
Db 217 ACCAAACAAAGAGCTTTATTCAGGAATGTAGCATTTTATTTCCAAATGACCTTCAAAATCA 276
OY 286 AAGGCTGATGATGAGACCAAACTGAGACCTACAAAATGCTGATGTTGTGTTGCT 345
Db 277 AATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 336
OY 346 GAGTCTATCTCTCCAGTAAATGATGAACCTTACATGAGAGATGGCAACTGTGAGAG 405
Db 337 GATCTTACCTGAAATATCGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 396
OY 406 AAGGTAAGAGATTCACCTTCATCTGATTTCTATTCAGAGAAAATAGTATGCTGAT 465
Db 397 AAAGGAAATATATATATATATATATATATATATATATATATATATATATATATATATAT 456
OY 466 GGACCAAGATGAGGATTTGTCATGATGATGATGATGATGATGATGATGATGATGATGAT 525
Db 457 GGGCTTGAGGATTAAGATTTTGTTCATGATGATGATGATGATGATGATGATGATGATGAT 516
OY 526 GAGTACATTAATGATGAGAAATCTTACTTATCCAAATGGA---AGAAATCAAGCATGTA 582
Db 517 GAGTATATATGACACGACCATTTCTATATTTCCAGAAAGAAACACTACTGGAAGCAACAGA 576
OY 583 TGTTCAGCAGATTTATCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 642
Db 577 TGTTCACCTGCTATTTACTGTTTACATGATGATGATGATGATGATGATGATGATGATGAT 636
OY 643 ACCAAAGATGACATTCATTAATTAAGTAAACAGAGCTCTATGAAAAAGATGTGAGTTGTT 702
Db 637 GCAGACCATTTTCAAGCATGATGATGATGATGATGATGATGATGATGATGATGATGAT 696
OY 703 CTCCAATCCCGCAGAGGAGAGGCTTCTTATATGTTTGCACAAATGATGATGATGAT 762
Db 697 CCAAGAGATCCCGACAGCTGACCAAGGATTCATGTTGTTATGCAAAATCTTGATTTG 756
OY 763 GTTGAATCTGTGACAGAAACCAACCAAGAGCTCCAAACCAAGCAAAATCAAAA 822
Db 757 ACTGATTTTGTACTGAAAAACACACAATTAAGAGAGCTCCAAACCTATATTAACAAATG 816
OY 823 TGCATATCTCGAAGCAGATGGAAGTGAATCGGTATCTGAGAGCTTTAAGAAAACCACT 882
Db 817 TGCATATCAGAAAGCAATGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 876
OY 883 CCTATGAC---AACACAGCCACCAATCCCACTTCTGATGCTGCAATTTGGACAAGA 939
Db 877 CCAATGACAGAAATTAATTTACTCTGCTTACTATTTTCAATTTGCTCAAGTCCAAAGAGGT 936
OY 940 ATTGTTGTTTGTGCTGACAAATCTGGAAGCATGCGATGTAAGCGCTCTCAATGGA 999
Db 937 GTAGTCTGTTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 996
OY 1000 CTGAATCAAGCAGCGCGCTTTTCTGCTGACAGACGTTGAGCTGGGCTCTGGGTTGGG 1059

```

```

Db 997 ATGAATCAAGCAGAGATTTACTTGTGATTCAAATTAATGAAAAGGATCCCTGGTGGG 1056
OY 1060 ATGCTGACATTTGACAGTGCCTCCATGTCACAAATGATGATGATGATGATGATGATGATGAT 1119
Db 1057 TTGGTCAATTTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1116
OY 1120 AGTACAGGAGCAGACATCTGCCAAAAGATTTACCTGACAGAGCTTACAGAGGAGCCTCCATC 1179
Db 1117 AACACTTACCAAAATATCTACAGCAAACTGCTCAAGAACTGATGATGATGATGATGATGAT 1176
OY 1180 TGCAGCGGCTTGCATGCGCATTTTCTGATGATGATGATGATGATGATGATGATGATGAT 1236
Db 1177 TGCAGGAGCAGTCAAAAGCAGGATTTTCCAGCAATTTCCCAAGATGATGATGATGATGAT 1236
OY 1237 TGTGAATTTGCTGCTGCGGATGATGATGATGATGATGATGATGATGATGATGATGAT 1296
Db 1237 TGTGAATTTGCTGCTGCGGATGATGATGATGATGATGATGATGATGATGATGATGAT 1296
OY 1297 GTCAAAACAAAGTGTGCGCATTCACACAGTCTGTTGGGCGCTTGCAGCTCAGAA 1356
Db 1297 GTCAAAACAAAGTGTGCGCATTCACACAGTCTGTTGGGCGCTTGCAGCTCAGAA 1356
OY 1357 CTAGAGAGCTTCCAAATGACAGAGGTTTACAGACATA----- 1397
Db 1357 CTAGAGAGCTTCCAAATGACAGAGGTTTACAGACATA----- 1397
OY 1398 -----TGTTCAGATCAAGTTCAAGACAT 1422
Db 1417 TATAGTGTGGAAGTTCATCTTTGTGACATGCTTTTATGCCATTAATAAATCAAT 1476
OY 1423 GGGCTCATTTGATGCTTTTGGGCGCTTTTATGACAAATGAGAGCTCTTCCAGGCGTCC 1482
Db 1477 GGGCTCATTTGATGCTTTTGGGCGCTTTTATGACAAATGAGAGCTCTTCCAGGCGTCC 1536
OY 1483 ATCCACTGAGAGTGAAGGATTAACCTTCAGAAACAGCAGTGTGATGATGATGATGATGAT 1542
Db 1537 CTTCAGTGTGAAGTGAAGGATTAACCTTCAGAAACAGCAGTGTGATGATGATGATGATGAT 1596
OY 1543 ATCGTGACAGCAGCCTGTGGGAAAGAGACCTTGTGTTTCTTATGACCTGGAACAGCAGCT 1602
Db 1597 CCGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1656
OY 1603 CCCCAAATCCTTCTGCGGATCCCATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1653
Db 1657 CCGAGCAATTAATTTTCAAGATTCGAAAGGAAAAAATATATATATATATATATATATAT 1716
OY 1654 GTGAGCAAAACCAACCAAAATGAGCTTACTTCAATCCAGAGATGCTTAAAGTTGGCACT 1713
Db 1717 GTTGAATTAATTTTGGGTGCGGCTTCCGAATACAGAGTATGACAGAGAGAGAGAGAG 1776
OY 1714 TGGAAATACAGTCTGCAA-----GCAAGCTCAGAAACCTTGGACCTGACTGACAG 1764
Db 1777 TGGACTTACAGCGTTGAAACCAATATACCAAAATCTCAATGCTGAACTGTGAGAAATGAG 1836
OY 1765 TCCGCTGCTGCAATGCTTACCTGCTGCTCAATGAGTGAAGTCTCCAAACGAAAGAGAG 1824
Db 1837 ACTGAGCAAGAAAGCCCTTACACAGCTCCAGTAATTTGCAACTGCTCAATGATGATGAT 1896
OY 1825 ACCAGCAAAATTTCCAGCAGCTGCTGATGATGATGATGATGATGATGATGATGATGATGAT 1884
Db 1897 ACAGCTATTAATCCCTTACCCAGAGATGTTTATGACAGTGTGAGTCAAGGTTTCTTCT 1956
OY 1885 ATTTCAGGCGCAGTGTGACAGCCTTATTTGAATCAAGTAATGGAAGAAACAGATTTACT 1944
Db 1957 GTTCTGGAATTAATTTGATGAGAGGATGATGATGATGATGATGATGATGATGATGATGAT 2016
OY 1945 GAATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2004
Db 2017 GAGTCTGCGCAATGAGAGAGAGGATGATGATGATGATGATGATGATGATGATGATGATGAT 2076
OY 2005 TATTTCAACTTATGACAGAGATGATGATGATGATGATGATGATGATGATGATGATGAT 2064

```

```

Db 2077 TATTTTACAGATATACATGGAAGAAATGGAGATATACAGTTTAAAGTGCTTACCAGGCAAGA 2156
Qy 2085 GTTAACGACGACGACGACGACGACGATATACCCACGACAGATGGACACTGTACTACTGTGC 21244
Db 2137 AAAAACACAGCTAGCG-----TAACTCAACAACAAGAAATAAAGCTCTGTATATACGCGC 21909
Qy 2125 TGAATGTGAATGATGTAATACAAATGGAATCCACGAAGACCTGGAATTAATTAAGATATAT 21849
Db 2191 TATGCTGAAAATGGAAAAATTAATCTGAACCCATCCAAACCTGGAAGTCAAGATATATGTG 22509
Qy 2185 GTTCAACACACAGCAAGATGTCTTTACAGAGAACATCTCTGGGAGGCTATTTGGCTCT 22444
Db 2251 GAAGAGAGCTCAACACAGACGACTTACAGAGACTACTCTGGAGGGTCTTTACTGTATCA 23109
Qy 2245 GATGT-----CCCAATAGCTCCCATACCTGATCTCTTCCACCTGGCCAAATCACCGACCTG 23019
Db 2311 GGAATGCTCCTTATGGTATATCTATCTCAAGTGTTCTCACTGTGTAATAATGTATACACTC 23709
Db 2302 AAGCGGGAATTAACAGGGGGGCACTCTCATTAATCTGACTTGGACAGCTCTCGGAGATAT 23619
Db 2371 GAGGCTAAGTTTCAAGAG--ATCATATTTCAACTTTCATGAGACGCCCCGTGGCAAGCTC 24279
Qy 2362 TATGACCATGGACAGACTGCACAGTATATCATTCGATAGTACAGTATATCTTGATCTC 24219
Db 2428 CTCGATTAAGAGAGAGAGCTGAGACTCATTTATAGATTAAGTAAACATTTCTGTGACCTC 24879
Qy 2422 AGAGACAAAGTTCAATGAATCTCTTCAAGTAAATACTACTGCTCATCCCAAAGCAACC 24819
Db 2488 CAAAGAAATTTTGTATTAAGCTGCTTAATATTAATACTCTTGATCTGATACCTAAGAGGCT 25479
Qy 2482 AACTCTGAGGAAGCTTTTGTGTATTAACCAAGAAACATTACTTTGAAAATGGACAGAT 25419
Db 2548 GGTTCACATAGAAATTTTGAATTTAAACCAAGAACTTCTAAATAGAGAAATGGTACGACA 26079
Qy 2542 CTTTTCATCTGATTCAGCTGTGATTAAGAGTGCATCTGAATCAAGAAATATCCAACTT 26019
Db 2608 TTCTATATGCAATTCAGCAATCATCATGAGCAATGTCACTCAAGAGTTTCAACACTT 26679
Qy 2602 GCACGAGATCTTTGTTATTTCTCCACAGACTCC 26369
Db 2668 GCACAGCAACTAACTTATTTCTCCACAGGAACC 27029

RESULT 5
US-08-469-667-8
Sequence 8, Application US/08469667
Patent No. 5733748
GENERAL INFORMATION:
APPLICANT: YU, Guo-Liang
APPLICANT: Rosen, Craig
TITLE OF INVENTION: Colon Specific Genes and Proteins
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,
ADDRESSEE: Stewart & Olstein
STREET: 6 Becker Farm Road
CITY: Roseland
STATE: NJ
COUNTRY: USA
ZIP: 07068-1739
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,667
FILING DATE: 06-JUN-1995
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Ferraro, Gregory D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 335800-435

```

[illegible]

Db 781 GGTGAATTTTGTGGCGTGAATAA 805

RESULT 6  
US-09-224-110-8

Sequence 8, Application US/09224110  
Patent No. 6337195

GENERAL INFORMATION:

APPLICANT: Yu, Guo-Liang

APPLICANT: Rosen, Craig

TITLE OF INVENTION: Colon Specific Genes and Proteins

NUMBER OF SEQUENCES: 24

CORRESPONDENCE ADDRESS:

ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,

STREET: Stewart & Olstein

CITY: Roseland

STATE: NJ

COUNTRY: USA

ZIP: 07068-1739

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/224,110

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/469,667

FILING DATE: 06-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Ferraro, Gregory D.

REGISTRATION NUMBER: 36,134

REFERENCE/DOCKET NUMBER: 325800-435

TELECOMMUNICATION INFORMATION:

TELEPHONE: 201-994-1700

TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 8:

SEQUENCE CHARACTERISTICS:

LENGTH: 878 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cDNA

FEATURE:

NAME/KEY: CDS

LOCATION: 2..685

US-09-224-110-8

Query Match 27.8%; Score 780.8; DB 4; Length 878;

Best Local Similarity 96.9%; Pred. No. 6.4e-231;

Matches 796; Conservative 0; Mismatches 8; Indels 1; Gaps 1;

Db 1992 TGTCTACTCAGAGTATTTACACACTTATGACACGATGTAGATACAGTGTAAAGTGGC 2051

Db 1 TGTCTACTCAGAGTATTTACACACTTATGACACGATGTAGATACAGTGTAAAGTGGC 60

Db 2052 GGGCTGTGGAGAGTTAAACGACGACGAGAGTGTATACCCAGCAGAGTGGAGCT 2111

Db 61 GGGCTGTGGAGAGTTAAACGACGACGAGAGTGTATACCCAGCAGAGTGGAGCT 120

Db 2112 GTACATACCTGGCTGATTTGGAATGATGAATATACATGATCCACCAAGCTGAAT 2171

Db 121 GTACATACCTGGCTGATTTGGAATGATGAATATACATGATCCACCAAGCTGAAT 180

Db 2172 TAATAAGATGATTTTCAACACCAAGAGTGTATTGACAGAAACATCTCGGAGGCTC 2231

Db 181 TAATAAGATGATTTTCAACACCAAGAGTGTATTGACAGAAACATCTCGGAGGCTC 240

Db 2232 ATTTGTGGCTTGTGATGTCCCAATGCTCCATACCTGATCTCTTCCCACTGGGCAAT 2291

Db 241 ATTTGTGGCTTGTGATGTCCCAATGCTCCATACCTGATCTCTTCCCACTGGGCAAT 300

Db 2292 CACCGACCTGAAAGGCGAAATTCACGGGGGAGTCTCATTAATCTGACTGGACAGCTCC 2351

Db 301 CACCGACCTGAAAGGCGAAATTCACGGGGGAGTCTCATTAATCTGACTGGACAGCTCC 360

Db 2352 TGGGATGATTTATGACATGAAAGAGCTTCACAGATATATCATTTGAAATAGTACAGTAT 2411

Db 361 TGGGATGATTTATGACATGAAAGAGCTTCACAGATATATCATTTGAAATAGTACAGTAT 420

Db 2412 TCTTGATCTCAGACACATTTCAATGAATCTCTTAAGATGATGATGCTGCTCATCC 2471

Db 421 TCTTGATCTCAGACACATTTCAATGAATCTCTTAAGATGATGATGCTGCTCATCC 480

Db 2472 AAGGAAGCCAACTGAGAGAGTCTTTTGTAAACAGAAACATTTCTTTGAAA 2531

Db 481 AAGGAAGCCAACTGAGAGAGTCTTTTGTAAACAGAAACATTTCTTTGAAA 540

Db 2532 TGGCAGATCTTTTCTATTCATTCAGGCTGTGATAGTGCATCTGAATCAGAAAT 2591

Db 541 TGGCAGATCTTTTCTATTCATTCAGGCTGTGATAGTGCATCTGAATCAGAAAT 600

Db 2592 ATCCACATTTGACGAGATATCTTTTATTCCTCCAGAGCTCCGCGACAGACACTAG 2651

Db 601 ATCCACATTTGACGAGATATCTTTTATTCCTCCAGAGCTCCGCGACAGACACTAG 660

Db 2652 TCCTGATGAAGCTGTCTCTCTGT-CTTAATATTCATATCAACAGACACCATCTTGCA 2710

Db 661 TCCTGATGAAGCTGTCTCTCTGT-CTTAATATTCATATCAACAGACACCATCTTGCA 720

Db 2711 TTCAATTTTAAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2770

Db 721 TTCAATTTTAAATATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 780

Db 2771 GGTGAATTTTGTGGCGTGAATAA 2795

Db 781 GGTGAATTTTGTGGCGTGAATAA 805

RESULT 7

PCT-US95-07289-8

Sequence 8, Application PC/TUS9507289

GENERAL INFORMATION:

APPLICANT: Yu, Guo-Liang

APPLICANT: Rosen, Craig

TITLE OF INVENTION: Colon Specific Genes and Proteins

NUMBER OF SEQUENCES: 24

CORRESPONDENCE ADDRESS:

ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,

STREET: Stewart & Olstein

CITY: Roseland

STATE: NJ

COUNTRY: USA

ZIP: 07068-1739

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US95/07289

FILING DATE: 06-JUN-1995

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Ferraro, Gregory D.

REGISTRATION NUMBER: 36,134

REFERENCE/DOCKET NUMBER: 325800-265

TELECOMMUNICATION INFORMATION:

TELEPHONE: 201-994-1700

TELEFAX: 201-994-1744

INFORMATION FOR SEQ ID NO: 8:

SEQUENCE CHARACTERISTICS:









|||||  
Db 61 CTCATTCACAAATAAGACATGTGACCCAGCATCTCTATCTGTTGAACCTACA 120  
Oy 229 GGAAGCCATTTTATTTAAAAATGTGCGATTGTGATTCCTCGAAGACGAAAG 288  
Db 121 GGAAGCCATTTTATTTAAAAATGTGCGATTGTGATTCCTCGAAGACGAAAG 180  
Oy 289 GGTGACTATGTAGACCAAACTTGAGACCTCAAAATGTGATGTCTGTGTTGC-TGA 347  
Db 181 GTGACTATGTAGACCAAACTTGAGACCTCAAAATGTGATGTCTGTGTTGC-TGA 240  
Oy 348 GTCTACTCTCCAGGTAATGATGAACCTACACATGAGCAGAT-GGGCAACTGTGAGAGA 406  
Db 241 GTCTACTCTCCAGGTAATGATGAACCTACACATGAGCAGATGGGGCAACTGTGAGAGA 300  
Oy 407 AGGG--TGAAAGATCCACCTCCTCTGATTTCAATTCGAGAAAAAGTTAGC-TGAT 463  
Db 301 AGGGGTGAAGAGATCCACCTCCTCTGATTTCAATTCGAGAAAAAGTTAGCTTGAT 360  
Oy 464 ATGACACCAAGGT-AGGGCATTTGTCCATGAGTGGG 499  
Db 361 ATGACACCAAGGTAAAGGCAATTTGTCCATGATGGG 397

RESULT 10  
US-09-385-982-23

; Sequence 23, Application US/09385982  
; Patent No. 6262334  
; GENERAL INFORMATION:  
; APPLICANT: ENDEGE, WILSON O., ET AL.  
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION  
; FILE OF INVENTION: PRODUCTS: II  
; FILE REFERENCE: CCNDA-260XX  
; CURRENT APPLICATION NUMBER: US/09/385,982  
; CURRENT FILING DATE: 1999-08-30  
; EARLIER APPLICATION NUMBER: 09/328,111  
; EARLIER FILING DATE: 1999-06-08  
; EARLIER APPLICATION NUMBER: 60/117,393  
; EARLIER FILING DATE: 1999-01-27  
; EARLIER APPLICATION NUMBER: 60/098,639  
; EARLIER FILING DATE: 1998-08-31  
; NUMBER OF SEQ ID NOS: 544  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 23  
; LENGTH: 576  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)..(576)  
; OTHER INFORMATION: n - A,T,C or G  
US-09-385-982-23

Query Match 8.1%; Score 228.2; DB 4; Length 576;  
Best Local Similarity 69.1%; Pred. No. 1.9e-60;  
Matches 385; Conservative 0; Mismatches 163; Indels 9; Gaps 5;  
Oy 1882 CCAATTCAGGGCCAGTGTACACCCCTGATTGATCATGTAATGAGAAAACTTACC 1941  
Db 2 CCGTCTCTTGAGCCAAATGTGACTCTTTCATTTGATTCACAGAAAGACATACAGAGTT 61  
Oy 1942 TTGSAATCTAGTGAATGAGACAGTGTGCTACTAATGAGAGAGGTCTACACCA 2001  
Db 62 TTGSAATCTTGATGAATGAGTGTGAGCGCTGATTTCTTCAAGAAATGATGATCTTACTC 121  
Oy 2002 AGGTATTTCAACAATTAATGACAGATGTATAGATACAGTGTAAAGTGGCGCTCTGGGA 2061  
Db 122 AGGTATTTCAACAATTAATGACAGATGTATAGATACAGTGTAAAGTGGCGCTCTATGA 181  
Oy 2062 GGAGTTAAAGCAGCAGCAGAGAGTATATCCCAAGCAGAGTGAACACTGTACATPACT 2121  
Db 182 GGAGCAGAACTGTCAGAGCTTAATTAAGGCTCTCCACTGATGATAGAGCGCTACATACCA 241

Oy 2122 GCGTGGATTGAGAAATGATGAATATACATGATCCACCAAGACCTGAATTAAGGAT 2181  
Db 242 GCGTGGATTGAGAAATGAGGGAATTAAGCAAAACCCGCAAGCTGAATTAAGT--GAG 298  
Oy 2182 GATGTTCAACACAGCAAGTGTGTTTCAGCAGACATATCTCTGGGAGCTCATTTGTGCT 2241  
Db 299 GATGTTCAACACAGCAAGTGTGTTTCAGCAGACATATCTCTGGGAGCTCATTTGTGCT 358  
Oy 2242 TGTGATGTCACCAATGTCCTCCATACCTGATCTCTCCACCTGGGCAATACAGACCTG 2301  
Db 359 TCACAGTCCCAAGC-CTTCTCTGCTGACCAATACCAACCAAGTCAATACAGACCTT 417  
Oy 2302 AAGCGGAATTTACAGGGGAGCTCTCAATTAATCTGACTTGGACAGCTCTGGGAGAT 2361  
Db 418 GATGCCACAGTTCATTAG--ATAAGATTATCTTATCATGAGACAGCAGAGATATAT 474  
Oy 2362 TATGACCATGGAACAGTCTACAGATATATCATTTGATTAAGTACAGATATCTGATCTC 2421  
Db 475 TTTGATGTTGGAAGATTCACAGCTTATATCAATGAATTA-TGCCAGTATCTTGA-CTA 532  
Oy 2422 AGAGCAAGTTCATGA 2438  
Db 533 AGAGCAAGTTCATGA 549

RESULT 11  
US-09-385-982-25

; Sequence 25, Application US/09385982  
; Patent No. 6262334  
; GENERAL INFORMATION:  
; APPLICANT: ENDEGE, WILSON O., ET AL.  
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION  
; FILE OF INVENTION: PRODUCTS: II  
; FILE REFERENCE: CCNDA-260XX  
; CURRENT APPLICATION NUMBER: US/09/385,982  
; CURRENT FILING DATE: 1999-08-30  
; EARLIER APPLICATION NUMBER: 09/328,111  
; EARLIER FILING DATE: 1999-06-08  
; EARLIER APPLICATION NUMBER: 60/117,393  
; EARLIER FILING DATE: 1999-01-27  
; EARLIER APPLICATION NUMBER: 60/098,639  
; EARLIER FILING DATE: 1998-08-31  
; NUMBER OF SEQ ID NOS: 544  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 25  
; LENGTH: 595  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)..(595)  
; OTHER INFORMATION: n - A,T,C or G  
US-09-385-982-25

Query Match 7.9%; Score 221.4; DB 4; Length 595;  
Best Local Similarity 68.4%; Pred. No. 2.4e-58;  
Matches 355; Conservative 0; Mismatches 155; Indels 9; Gaps 4;  
Oy 2114 ACATACCTGGCTGATGATGATGAATGAATGAATGAATGATCCACCAAGACCTGAATTA 2173  
Db 1 ACATACCTGGCTGATGATGATGAATGAATGAATGAATGAATGATCCACCAAGACCTGAATTA 60  
Oy 2174 ATAGAGATGATGTTCAACACAGCAAGTGTGTTTACGAGAACATCTCTGGGAGGCTAT 2233  
Db 61 ATAGAGATGATGTTCAACACAGCAAGTGTGTTTACGAGAACATCTCTGGGAGGCTAT 117  
Oy 2234 TTGTGCTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2293  
Db 118 TTGTGCTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 177  
Oy 2294 CCGACCTGAAGGCGGAATTCACGGGGAGTCTCATTAATCTGACTGAGACAGCTCTG 2353  
Db 178 CAGACCTTGATGCCACAGTCAATGAG--ATAAATTAATCTTACATGAGACAGACAG 234





***This Page Blank (uspto)***

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 : Search time 12.0358 Seconds  
(without alignments)  
11417.439 Million cell updates/sec

Title: US-09-049-696-18  
Perfect score: 5080  
Sequence: 1 GAATATCACAGGAGATGATAC.....AAATTAATCATTCATCTTA 2813

Scoring table:  
BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 seqs, 24425594 residues  
Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame\_n2p.model -DEV=xlh  
-O=/cgn2\_1/USPTO.spool/US09049696/runat.16102002-115821-24739/app\_query.fasta\_1.13694  
-DB=Issued\_Patents\_AA -CPMT=fastan -SUFFIX=ra1 -MINMATCH=0.1 -LOOPLC=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=bloms62 -TRANS=human40.cdl  
-LIST=45 -DOCALLIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTPMF=ptc -NORM=ext HEADSIZE=500 -MINLEN=0 -MAXLEN=200000000  
-USER=US09049696\_ECGN1.1\_57\_etunat.16102002-115821-24739 -NCPU=6 -ICPU=3  
-NO\_XLPHY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG -DEV.TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6 -Fgapext=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELop=6 -DELEXT=7

Database :

Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PCtus.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/backfile1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	4753	93.6	914	4	US-09-193-562D-28
2	2462.5	48.5	903	4	US-09-193-562D-46
3	2328	45.8	905	4	US-09-193-562D-2
4	2324.5	45.8	902	4	US-09-193-562D-34
5	2258.5	44.5	1000	4	US-09-193-562D-30
6	2125	41.8	795	4	US-09-193-562D-11
7	2125	41.8	821	4	US-09-193-562D-12
8	1988	39.1	943	4	US-09-193-562D-32
9	1203	23.7	228	1	US-08-468-667-9
10	1203	23.7	228	4	US-09-224-110-9
11	1203	23.7	228	5	PCT-US95-07289-9
12	947.5	18.7	342	4	US-09-193-562D-13

13	408	8.0	203	4	US-09-193-562D-3	Sequence 3, Appl
14	143	2.8	2411	4	US-09-268-347-36	Sequence 36, Appl
15	141.5	2.8	1912	1	US-08-409-995-4	Sequence 4, Appl
16	141.5	2.8	1912	3	US-08-685-467-4	Sequence 4, Appl
17	141.5	2.8	2353	4	US-09-377-155-33	Sequence 33, Appl
18	141.5	2.8	2353	4	US-08-913-942-4	Sequence 4, Appl
19	141.5	2.8	2353	4	US-09-669-974-33	Sequence 33, Appl
20	141.5	2.8	2354	4	US-09-268-347-47	Sequence 47, Appl
21	140.5	2.8	1529	2	US-08-728-470-10	Sequence 10, Appl
22	140.5	2.8	1529	4	US-08-719-641-10	Sequence 10, Appl
23	138.5	2.7	1536	1	US-08-038-682-2	Sequence 2, Appl
24	138.5	2.7	1536	1	US-08-302-832-2	Sequence 2, Appl
25	138.5	2.7	1536	2	US-08-530-198-2	Sequence 2, Appl
26	138.5	2.7	1536	2	US-08-469-880-2	Sequence 2, Appl
27	138.5	2.7	1536	2	US-08-728-470-2	Sequence 2, Appl
28	138.5	2.7	1536	2	US-08-617-697-2	Sequence 2, Appl
29	138.5	2.7	1536	4	US-08-719-641-2	Sequence 2, Appl
30	138.5	2.7	1600	2	US-08-617-697-10	Sequence 10, Appl
31	131	2.6	1161	4	US-09-327-536-2	Sequence 2, Appl
32	130	2.6	1848	4	US-08-296-791-6	Sequence 6, Appl
33	130	2.6	1848	5	PCT-US95-10661A-6	Sequence 6, Appl
34	127.5	2.5	1702	4	US-08-296-791-5	Sequence 5, Appl
35	127.5	2.5	1702	5	PCT-US95-10661A-5	Sequence 5, Appl
36	121	2.4	710	4	US-09-171-461-16	Sequence 16, Appl
37	121	2.4	1541	4	US-08-296-791-3	Sequence 3, Appl
38	121	2.4	1541	5	PCT-US95-10661A-3	Sequence 3, Appl
39	120.5	2.4	2439	4	US-08-074-658-11	Sequence 11, Appl
40	118.5	2.3	599	3	US-09-045-632-28	Sequence 28, Appl
41	118.5	2.3	642	3	US-09-045-632-35	Sequence 35, Appl
42	118.5	2.3	818	3	US-09-045-632-25	Sequence 25, Appl
43	118.5	2.3	861	3	US-09-045-632-34	Sequence 34, Appl
44	118.5	2.3	918	3	US-09-045-632-21	Sequence 21, Appl
45	118.5	2.3	961	3	US-09-045-632-33	Sequence 33, Appl

#### ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
Sequence 28, Application US/09193562D  
Patent No. 6309857

GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 28  
LENGTH: 914  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-193-562D-28

#### Alignment Scores:

Pred. No.: 0  
Score: 4753.00  
Percent Similarity: 100.00%  
Best Local Similarity: 99.78%  
Query Match: 93.56%  
DB: 4  
Gaps: 0

US-09-049-696-18 (1-2813) x US-09-193-562D-28 (1-914)

Oy 25 ATGGGGCATTAGAGTCTGCTGTCATCTTACCTTCTGAGAGGGCCCTG 84  
Db 1 MetGlyProPheIysSerValPheIleuIleuHisIeuGluGlyAlaIeu 20  
Oy 85 AGTAATCACATTCACGTCGACACAAACAAAGCATGACGATGCTGTCATCGAC 144

Db 21 SerAsnSerLeuIleGlnLeuAsnAsnGlnGlyTyrGluGlyIleValValAlaIleAsp 40  
OY 145 CCCAATGTGCGCAGAAAGATGAAACACTCATTTCAACAATAAAGACATGGTGACCGCA 204  
Db 41 ProAsnValProGlnAspIleThrLeuIleGlnGlnIleIleAspMetValThrGlnAla 60  
OY 205 TCTCTGTATCTGTTGAACCTACAGAAAGCATTTTATTCAAAAATGTCCTCATTTTG 264  
Db 61 SerLeuTyrLeuPheGlnValThrGlyLysArgPheTyrPheLysAsnValAlaIleLeu 80  
OY 265 ATTCCGAAACATGGAAGACAAAGGCTGACTATGTGAGCCAAACTTGAGACCTACAA 324  
Db 81 IleProGlnThrThrPheLysThrLysAlaAspTyrValArgProLysLeuGlnThrTyrLys 100  
OY 325 AATGCTGATGTTCTGGTGTGCTGAGTCTACTCTCCAGGTAATGATGAAACCTTACACTG 384  
Db 101 AsnAlaAspValLeuValAlaGlnSerThrProProGlnLysAsnAspIleProTyrThrGln 120  
OY 385 CAGATGGGCACTGTGAGAGAAAGGTTGAAAGGATCCACTGCTCATTTTCATTGCA 444  
Db 121 GlnMetGlnLysAsnGlnGlyLysGlnValArgIleHisLeuThrProAspPheIleAla 140  
OY 445 GGAATAAAAGTTAGCTGAATATGAGCCACAAAGTAGGAGCAATTTGTCATGAGGCTCAT 504  
Db 141 GlyLysLysLeuAlaGlnTyrGlnTyrProGlnGlnLysAlaPheValHisGlnThrAlaHis 160  
OY 505 CTACGATGGGAGTATTTGACGAGTACATATATGATGAGAAATTTCACTTATTCATGGA 564  
Db 161 LeuArgTyrPheLysLeuAlaGlnPheAspGlnTyrAsnAsnAspIleLysPheTyrLeuSerAsnGln 180  
OY 565 AGAATACAAACAGTAAAGATGTTCAGCAGATTAATCTGTTCAATGTAAGTAAGAAAGTGT 624  
Db 181 ArgIleGlnAlaValAlaArgCysSerAlaGlyIleThrGlnTyrHisValValLysLysCys 200  
OY 625 CAGGAGGACGCTGTTACACCAAAAGATGCACATTCATTAAGTAAAGACGCTATGAA 684  
Db 201 GlnGlnLysLysCysTyrThrLysArgCysThrPheAsnLysValThrGlyLeuTyrGln 220  
OY 685 AAAGGATGTGAGTTGTTCCCAATCCCGCAGAGGAGGAGGTTTATTAATGTTTGA 744  
Db 221 LysGlnCysGlnPheValLeuGlnSerArgIleThrGlnLysAlaSerIleMetPheAla 240  
OY 745 CAACATGTGATCTATAGTTGAATTCGTACAGAACAAACCAACAAAGAAAGCTCA 804  
Db 241 GlnHisValAspSerIleValGlnPheCysThrGlnAsnHisAsnLysGlnAlaPro 260  
OY 805 AACAAAGCAAAATCAAAATGCAATCTCCGAAGCAGATGGGAAGATCCCGATTCGAG 864  
Db 261 AsnLysGlnAsnGlnLysCysAsnLeuArgSerThrTyrPheGlnValIleArgAspSerGln 280  
OY 865 GACTTTAAGAAACACACTCCATGATGACAAACAGCAGCCAAATCCCACTTCTCATTTGCTG 924  
Db 281 AspPheLysLysThrThrProMetCThrThrGlnProProAsnProThrPheSerLeuLeu 300  
OY 925 CAGATTGGACAAGAAATTTGTGTGTTAGTCTTGACAATCTGGAAGCAGTGGCTGTG 984  
Db 301 GlnIleGlnArgIleValCysLeuValLeuAspLysSerGlnMetAlaThrGly 320  
OY 985 AACCGCTCAATCGACTAATCAACAGAGCGACGCTTTTCCGTCGTCGAGAGCTGAGCTG 1044  
Db 321 AsnArgLeuAsnArgLeuAsnGlnAlaGlnLeuPheLeuGlnThrValGlnLeu 340  
OY 1045 GGGTCTGGGTGGAGGTGATGATTTGACAGTGTGCTGCCATGTACAAAGTGAATCTCA 1104  
Db 341 GlySerTyrPheValGlyMetValThrPheAspSerAlaAlaHisValGlnSerGlnLeuIle 360  
OY 1105 CAGATTAACAGTGGCAGTACAGAGGACACACTCGCCAAAGATTAAGTACGACAGCTTCA 1164  
Db 361 GlnIleAsnSerGlnSerAspArgAspThrLeuAlaLysArgLeuProAlaAlaIleAsp 380  
OY 1165 GGAGGAGCTCATCTGACAGCGGCTTGGATCGGATTTACTGTATGAGAAAGAAATAT 1224  
Db 381 GlyGlnTyrThrSerIleCysSerGlnLeuArgSerAlaPheThrValIleArgLysLysTyr 400

OY 1225 CCAACTGATGATCTGAAATTTGTGCTGCTGACGAGATGGGGAAGACAACACTATTAAGTGG 1284  
Db 401 ProThrAspGlnSerGlnIleValLeuLeuThrAspGlnLysAsnThrIleSerGln 420  
OY 1285 TGCCTTTAACGAGGTCAACAAAGTGTGCCATCATCCACACAGTCCGCTTGGGGCCCTCT 1344  
Db 421 CysPheAsnGlnValLysGlnSerGlnAlaIleIleHisThrValAlaLeuGlnProSer 440  
OY 1345 GCAGCTCAAGAACTAAGAGGAGCTGCCAAATGACAGAGGTTTACAGACATATGCTTCA 1404  
Db 441 AlaAlaGlnLeuGlnLeuSerLysMetThrGlnGlyLeuGlnThrTyrAlaSer 460  
OY 1405 GATCAAGTTTCAGAACAAATGGCTCATTTGATGCTTTGGGCGCTTTATCAGGAAATGGA 1464  
Db 461 AspGlnValGlnAsnAsnGlnLysLeuIleAspAlaPheGlnAlaLeuSerSerGlnLysGln 480  
OY 1465 GCTGTCTCAGCGCTCCATCCAGCTTACAGTAAAGGATTAACCTCCACAAACAGCGCAG 1524  
Db 481 AlaValSerGlnArgSerIleGlnLeuGlnSerLysGlnLeuThrLeuGlnAsnSerGln 500  
OY 1525 TGGATGAATGGCAGCATGATCGTGACAGCACCGTGGGAAGAGACATTTGTTCTTATC 1584  
Db 501 TrpMetAsnGlnTyrValIleValAspSerThrValGlnLysAspThrLeuPheLeuIle 520  
OY 1585 ACCGTGACAAAGCAGCCCTCCCAATCTCTCTGCGATCCACAGTGACAGACAGCAAGGT 1644  
Db 521 ThrTyrThrThrGlnProProGlnIleLeuLeuThrProAspProSerGlnLysGlnGln 540  
OY 1645 GCCTTTGTGTGTGCAAAAACAAAGATGGCTTCACTCCAAATCCAGGCAATGCTAAG 1704  
Db 541 GlyPheValValAspLysAsnThrLysMetAlaTyrLeuGlnIleProGlnLysLeuLys 560  
OY 1705 GTTGGCACTTGGAAATACAGTCTGCAAGCAGCTCAACAACTTGACCTGACTGTACG 1764  
Db 561 ValGlnTyrThrLysLysSerLeuGlnAlaSerSerGlnThrLeuThrLeuThrValThr 580  
OY 1765 TCCCGTGCCTCAATGCTACCTGCTCCAAATTACAGTACACTTCAAAACGAACAGAGC 1824  
Db 581 SerArgAlaSerAsnAlaThrLeuProProIleThrValThrSerLysThrAsnLysAsp 600  
OY 1825 ACCAGAAATTCGCCAGCCCTCGTAGTTTATGCAATATTTGCCAAGAGACCTCCCA 1884  
Db 601 ThrSerLysPheProSerProLeuValValTyrAlaAsnIleArgGlnLysAlaSerPro 620  
OY 1885 ATTCTCAGGCGCAGTGTCAAGCCTGATGTAATCAGTAATGGAAGAAACACTTACTTCG 1944  
Db 621 IleLeuArgAlaSerValThrAlaLeuIleGlnSerValAsnGlnLysThrValThrLeu 640  
OY 1945 GAACCTACTGATTAATGAGAGAGTGTGATGCTACTAAGATGACAGGCTTACTCAAG 2004  
Db 641 GlnLeuLeuAspAsnGlnLysAlaGlnAlaAspAlaThrLysAspAspLysValTyrSerArg 660  
OY 2005 TATTTCACTATGATGACAGAAATGATAGTATACAGTAAAGTGGGCGCTCGGAGCA 2064  
Db 661 TyrPheThrThrLysThrAspThrAsnGlnArgTyrSerValLysValArgAlaLeuGlnGly 680  
OY 2065 GTTAACGACCGACAGAGGAGATGATACCCACACAGTGGAGCACTGTAACACTGGC 2124  
Db 681 ValAsnAlaAlaArgArgValIleProGlnGlnSerGlnAlaLeuTyrIleProGln 700  
OY 2125 TGGATTGAGAAATGATGAATACAAATGGAATCCACAAAGCTGAATTAATGAATGAT 2184  
Db 701 TrpIleGlnAsnAspGlnIleGlnThrAspProProArgProGlnIleAsnLysAspAsp 720  
OY 2185 GTTCAACACAGCAAGATGTTTACAGCAACAATCTCGGAGCGCTCATTTGTGCTTCT 2244  
Db 721 ValGlnHisLysGlnValCysPheSerArgThrSerSerGlnLysSerPheValAlaSer 740  
OY 2245 GATGTCCCAATGCTCCCATCTGATCTCTTCCACACTGCGCAATACCGCAGCTGAAG 2304  
Db 741 AspValProAsnAlaProIleProAspLeuPheProProGlnIleThrAspLeuLys 760

QY 2305 GCGGAAATTCACGGGGCAGCTCTCATTAATCTGACTTGGACAGCTCTGGGATGATTAAT 2364  
 |||||  
 Db 761 AAGluIleHisIsglySerLeuIleAsnLeuThrTrpThrAlaProGlyAspAspTyr 780  
 |||||  
 QY 2365 GACCATGGAACAGCTCACAAGTATATCATTCGATTAAGTACAAGTATTCGATTCACA 2424  
 |||||  
 Db 781 ASPHISgLYThraAlaHisIstYrIleIleArgIleSerThrSerIleLeuAspLeuArg 800  
 |||||  
 QY 2425 GACCAATGCAATGCAATCTCTCAAGTACAGTACAGCTCTCTCAATCCCAAGAGGAGCAAC 2484  
 |||||  
 Db 801 AspValPheAsnIleuSerLeuGlnValAsnThrThrAlaLeuIleProGlySglValAsn 820  
 |||||  
 QY 2485 TCTGAGGAAGTCTTTTGTGTTAAACGAGAAACATTACTTTGAAAATGGCAGCATCTT 2544  
 |||||  
 Db 821 SerGluGlnValPheLeuPheLeuGlySerProGluAsnIleThrPheGluAsnGlyThrAspLeu 840  
 |||||  
 QY 2545 TTCATTGCTATTCAGGCTGTGTGATTAAGTGCATGCAATCAGAAATATCCAACTTGA 2604  
 |||||  
 Db 841 PheIleAlaIleGlnIleValAspIleValAspLeuIleSerGluIleSerAsnIleAla 860  
 |||||  
 QY 2605 CGAGTATCTTTGTTTATTCCTCCACAGACTCCGCGCAGAGACCTGCTCATGTAAGC 2664  
 |||||  
 Db 861 ArgValSerLeuPheIleProGlnThrProGluThrProSerProAspGluThr 880  
 |||||  
 QY 2665 TCTGCTCTTGTCTATATATTCATATCAACAGACCATTCCTGGCATTCACATTTTAAA 2724  
 |||||  
 Db 881 SerAlaProCysProAsnIleHisIleAsnSerThrIleProGlyIleHisIleLeuIys 900  
 |||||  
 QY 2725 ATTATGTGCAAGTGTAGAGACACTGACGCTGTCAATAGCC 2766  
 |||||  
 Db 901 IleMetTrpIysTrpIleGlyGluLeuGlnLeuSerIleAla 914  
 |||||

## RESULT 2

US-09-193-562D-46  
 ; Sequence 46, Application US/09193562D  
 ; Patent No. 6309857  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Pauli, Benedict U.  
 ; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 ; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 ; FILE REFERENCE: 18617.0052  
 ; CURRENT APPLICATION NUMBER: US/09/193,562D  
 ; CURRENT FILING DATE: 1998-11-17  
 ; PRIOR APPLICATION NUMBER: US/60/065,922  
 ; PRIOR FILING DATE: 1997-11-17  
 ; NUMBER OF SEQ ID NOS: 47  
 SEQ ID NO 46  
 LENGTH: 903  
 TYPE: PRT  
 ORGANISM: Unknown  
 FEATURE:  
 ; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal  
 ; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-  
 ; OTHER INFORMATION: 31026)  
 US-09-193-562D-46

## Alignment Scores:

Pred. No.: 5,82e-207 Length: 903  
 Score: 2462.50 Matches: 494  
 Percent Similarity: 71.04% Conservative: 139  
 Best Local Similarity: 55.44% Mismatches: 233  
 Query Match: 48.47% Indels: 25  
 DB: 4 Gaps: 13

US-09-049-696-18 (1-2813) x US-09-193-562D-46 (1-903)

QY 25 AAGGGCCATTAAAGAGTCTGTGTTCAATTCATTCACCTTCATAGAGGGCCCTG 84  
 ||| ||| :::: ||| ||||| ||||| |||  
 Db 1 MetValProArgLeuThrValIleLeuPheLeuThrLeuHisIleuLeuProGly---Met 19  
 |||||  
 QY 85 ACTAATTCACGTACAGCTGGAACAACAATGGCTATGAAGGCAATTCGTTGCATTCGAC 144  
 ::|||::||| ||| ||||| ||||| ::|||::|||  
 Db 20 LysSerSerMetValAsnLeuIleAsnGlnGlyTyrAspGlyIleValIleAlaIleAsn 39

QY 145 CCCAATGTGCGACAGATGAAACATCATTTCAACAATAAAGACATGGTGACCCAGCA 204  
 |||||  
 Db 40 ProSerValProGluAspGluIysLeuIleGlnAsnIleIysGluMetValThrGluAla 59  
 |||||  
 QY 205 TCTGTGATCTGTGTTGAAGCTACAGGAAGCGATTTTATTTCAAAAATGTGGCATTTTG 264  
 ||| ||||| ||||| ::||| ||||| ::|||  
 Db 60 SerThrTyrLeuPheHisAlaThrLysArgGlyValThrPheArgAsnValSerIleLeu 79  
 |||||  
 QY 265 ATTCTGAAACATGGAAGCAACAAGGCTGATGTGAGACCAAACTTGAGACTTCGAAA 324  
 ||||| ||||| ::|||  
 Db 80 IleProMetThrTrpLysSerLysSerGluTyrLeuMetProIysGlnIleuSerTyrAsp 99  
 |||||  
 QY 325 AATGCTGATGTGCTGTGCTGAGTCTACTCCGCAAGTAAGTACACCTGACATGAG 384  
 ||| ::|||  
 Db 100 GlnAlaGlnValIleValAlaAsnProTyrLeuLysHisGlyAspAspProTyrThrLeu 119  
 |||||  
 QY 385 CAGATGGGCAACTGTGAGAGGAAGGGTGAAGAGATCCACCTCCTCATTTTCATTCGA 444  
 ||| ||| |||||  
 Db 120 GlnTyrGlyArgCysGlyGluIysGlnIlyThrIleHisPheThrProAsnPheLeu 139  
 |||||  
 QY 445 GCAAAAAGTACAGTGAATATGACCAACAAGGTAGGCAATTTGTCATGATGGCTCAT 504  
 ||| |||||  
 Db 140 ThrAsnAsnLeuProIleTyrGlySerArgGlyArgAlaPheValHisGluTrpAlaHis 159  
 |||||  
 QY 505 CTACGATGGGAGTATTTGACGAGTACATTAATGATGAGAAATTTCTACTTATCC---AAT 561  
 |||||  
 Db 160 LeuArgTrpGlyIlePheAspGluTyrAsnGlyAspGlnProPheTyrIleSerArgArg 179  
 |||||  
 QY 562 GCAAGATATCAAGACAGTAAAGATGTTCCAGCAGTATTAATCTGTAACAATGATAAGAG 621  
 ||| ::|||  
 Db 180 AsnThrIleGluAlaThrArgCysSerThrHisIleThrGlyThrAsnValIleValLys 199  
 |||||  
 QY 622 TGTACAGGAGCAGCTGTTTACACCAAAAGATGCACATTCATTAAGTAAAGACTTAT 681  
 |||||  
 Db 200 CysGlnGlyGlySerCysIleThrArgProCysArgArgAspSerGlnThrGlyLeuTyr 219  
 |||||  
 QY 682 GAAAAGATGAGTGTCTTCTCCAAATCCCGCAGCAGGAGGCTCTTAATGTTT 741  
 ||| |||||  
 Db 220 GluAlaLysCysThrPheIleProGluLysSerGlnThrAlaArgGluSerIleMetPhe 239  
 |||||  
 QY 742 GCACAACATGTTGATCTTATGTTAGTAAATCTGTACAGAACAAACCAACAAGAGCT 801  
 ||| ::|||  
 Db 240 MetGlnSerLeuHisSerValThrGluPheCysThrGluLysThrHisAsnValGluAla 259  
 |||||  
 QY 802 CCAACACGCAAAATGCAAAATGCAATCTCCAGACACATGGAGAGTATCCGTGATTT 861  
 |||||  
 Db 260 ProAsnLeuGlnAsnLysMetCysAsnGlyLysSerThrTrpAspValIleMetAsnSer 279  
 |||||  
 QY 862 GAGGACTTTAAGAAAACACCTCTATAGACA-----ACACAGCCACCAATCCACCTTC 915  
 |||||  
 Db 280 ThrAspPheGlnAsnThrSerProMetThrGluMetAsnProThrGlnProThrPhe 299  
 |||||  
 QY 916 TCATTGCTCAGATTTGGACAAGAATCTGTGTTAGTCTTGACAAATCTGGAAGCATG 975  
 |||||  
 Db 300 SerLeuLeuLysSerLysGlnArgValValCysLeuValLeuAspLysSerGlySerMet 319  
 |||||  
 QY 976 GCGACTGTAAACCGCTCAATGCACTGAATCAAGCAGGCCAGCTTTCTGCTGCAGACA 1035  
 ::|||  
 Db 320 SerSerGlnAspArgLeuPheArgMetAsnGlnAlaIleGluLeuPheLeuIleGlnIle 339  
 |||||  
 QY 1036 GTTGGAGCTGGGCTCGGTGGAGATGACATTTGACAGAGCGTGGCCCATATACAAACT 1095  
 ::|||  
 Db 340 IleGluLysGlySerLeuValGlyMetValThrPheAspSerValAlaGluIleArgAsn 359  
 |||||  
 QY 1096 GAATCATATACATAAAGAGTGGCAGTGACAGGACACACTGCCAAAGATTTACTTCGCA 1155  
 ||| ::|||  
 Db 360 AsnLeuThrLysIleThrAspAspAsnValTyrGluAsnIleThrAlaAsnLeuProGln 379  
 |||||  
 QY 1156 GCAAGCTTCAAGAGGAGCTGCATTCGACAGCGGCTTCGATCGGCAATTT---ACTGTGAT 1212  
 |||||  
 Db 380 GluAlaAsnGlyGlyThrSerIleCysArgGlyLeuLysAlaGlyPheGlnAlaIleIle 399





Db 67 ThrIysargArgValTyrPheArgAsnValSerIleLeuIleProMetThrTrpLysSer 86  
QY 286 AAGGCGACATATGTGAGCAAAACTTGAGACCTACAAAAATGCTATGTCGGTGGCT 345  
Db 87 LysSerGluTyrPheIleProLysGlnLysSerTyrAspGlnAlaValAla 106  
QY 346 GAGTACTACTCTCCAGGTAAATGATGAGACCTTACAGTACAGATGGGACCTGGAGAG 405  
Db 107 AsnProTyrLeuLysTyrGlnAspAspProTyrThrLeuGlnTyrGlnArgGlyGln 126  
QY 406 AAGGGTAAAGATCCACCTCACTCTGTATTCATTCGACGAAAAAGTTAGTGAATAT 465  
Db 127 LysGlyLysTyrIleHisPheThrProAsnPheLeuIleThrAsnAsnPheHisIleTyr 146  
QY 466 GAGCCACAGGTATGGCATTTGTCATGAGTGGGCTCATACGATGGGAGATTTGAC 525  
Db 147 GlySerArgGlyArgValPheValHisGlnTrpAlaHisLeuArgTrpGlyIlePheAsp 166  
QY 526 GAGTCAAAATGATGAGAAATTCATCTATTCG---AATGGAAGATACAGCAGTAAGA 582  
Db 167 GluTyrAsnValAspGlnProPheTyrIleSerArgLysAsnThrIleGlnAlaThrArg 186  
QY 583 TGTTCACAGATTTACTGGTACAAATAGTA---AAGAAGTGCAGGAGGACCTGT 639  
Db 187 CysSerThrHisIleThrGlyIleAsnValAlaPheLysLysCysProGlyLysSerCys 206  
QY 640 TACACCAAAAGATGCACATTCATATAAGTAAACGAGCTCTATGAAAAAGATGTGACTT 639  
Db 207 IleThrSerLeuCysArgArgAspSerGlnThrGlyLeuTyrGlnAlaLysCysThrPhe 226  
QY 700 GTTCTCAATCCCGCAGCAGGAGGAGGCTTCATATGTTGTCACAAACATGTGATTCG 759  
Db 227 LeuProLysLysSerGlnThrAlaLysGlnSerIleMetPheMetProSerLeuHisSer 246  
QY 760 ATATGTAATTTGTATCAGAAACAAACACAAAGAAAGCTCAAAACAAACAAATTCGA 819  
Db 247 ValThrGluPheCysThrGlyLysThrHisAsnThrGlnAlaProAsnLeuGlnAsnLys 266  
QY 820 AATGGAATCTCGAGCAGATGGGAAGTACCGGATTCGTGAGGACTTTAAGAAAC 879  
Db 267 MetCysAsnGlyLysSerThrTrpAspValIleMetAsnSerValAspPheGlnAsnThr 286  
QY 880 ACTCCATATGACA-----ACACAGCCACCAAAATCCACCTTCATGTCGTCGATTCGA 933  
Db 287 SerProMetThrGluMetAsnProProThrHisProThrPheSerLeuLeuLysSerLys 306  
QY 934 CAAAGATTTGTGTTTAACTCTTGAACAAATGTGAAAGCATGGGACGTGGTAACGCGCTC 933  
Db 307 GlnArgValValCysLeuValLeuAspLysSerGlySerMetSerAlaGlnAspArgLeu 326  
QY 994 AATGCACTGAATCAACAGCGCCAGCTTTCCTCTGTCAGACAGTGAAGCTGGGCTCTGTG 1053  
Db 327 PheGlnMetAsnGlnAlaAlaGlnLeuTyrLeuIleGlnValIleGlnLysGlySerLeu 346  
QY 1054 GTTGGAGTGTGATTTGATACAGTCTGCCCATGACAAAGTGAATTCATCATGATTAAC 1113  
Db 347 ValGlyMetValThrPheAspSerValAlaGlnIleGlnAsnHisLeuThrArgIleThr 366  
QY 1114 AGTGGCATGACAGGAGCAGCACTCGCCAAAGATTAATCTGACAGCATTCAGAGGAGGAG 1173  
Db 367 AspAspAsnValTyrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlnLysThr 386  
QY 1174 TGCATATGACGGGCTTGATGATGCAATTT---ACTGTGATTAAGAAATATTCACACT 1230  
Db 387 SerIleCysArgGlyLeuLysAlaGlyPheGlnAlaIleIleHisSerAspGlnSerThr 406  
QY 1231 GATGATCTGAATTTGTGCTGAGCAGGATGGGAGAGACAACTTAATGATGGTCTTT 1290  
Db 407 SerGlySerGluIleIleLeuLeuThrAspGlyGlnAspAsnGlnLysAsnSerCysPhe 426  
QY 1291 AACGAGTCAAAACAAAGTGGTGCATCATCAACAGTGCCTTGGGCGCTTCGACGCT 1350  
Db 427 GluAspValLysArgSerGlyAlaIleIleHisThrIleAlaLeuGlnLysProSerAlaAla 446

QY 1351 CAAGACTAGAGGAGCGTGTCCAAATGACAGAGGTTTACAGCATATGCTTCAGATCAA 1410  
Db 447 LysGlnLeuGlnThrLysSerAsnMetThrGlyGlyTyrArgPhePheAlaAsnLysAsp 466  
QY 1411 GTTCAGAACAAATGGCTCATTTGATGCTTTTGGGCGCTTTCATCAAGAAATGAGCTGTC 1470  
Db 467 Ile-----ThrGlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySerIle 484  
QY 1471 TGTCAAGCGCTCCATCCAGCTTGAGATTAAGGATTAACCTCCAGAACCCAGTGGATG 1530  
Db 485 ThrGlnGlnAlaIleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgVal 504  
QY 1531 AATGGCAGATGATGTGGTGAACAGCAGCGGGGAGAGACAACTTTGTTTATACACCTGG 1590  
Db 505 AsnGlyThrValProAlaAspSerThrValGlyAsnAspThrPhePheValValThrTrp 524  
QY 1591 ACAGCAGCAGCTCCCAAAATCTTCTCTGGATCCGATGGAGACAG-----AAGCAAGGT 1644  
Db 525 ThrIleGlnLysProGlnIleValLeuGlnAspProLysGlyLysLysTyrLysThrSer 544  
QY 1645 GCGTTTGTATGTGACAAA---AACACCAAAATGGCTACCTCCAAATCCAGGCAATGGCT 1701  
Db 545 AspPheLysGlnAspLysLeuAsnIleArgSerAlaArgLeuGlnIleProGlyIleAla 564  
QY 1702 AAGTTGGCAGCTTGGAAATACAGTCTG-----CAAGCAAGCTCAAAACCTTGAGC 1752  
Db 565 GluThrGlyThrTrpThrTyrSerLeuLysAsnHisAlaSerSerGlnMetLeuThr 584  
QY 1753 CTGAGTGTACAGTCCCGTCCGTCGTCACAAATGCTACCTGCTCAATTCATGATTCACAA 1812  
Db 585 ValThrValThrThrArgAlaArgSerProThrIleProProValIleAlaThrAlaHis 604  
QY 1813 ACGAAGAGACACACAGAAATTCGCCAGCCTCTGATGTTATGCAAAATTTGCGCAA 1872  
Db 605 MetSerGlnHisThrAlaHisTyrProSerProMetIleValTyrGlnAlaGlnValSerGln 624  
QY 1873 GAGCGCTCCCAATGCTCAGGCGCAGGTCACAGCCCTGATGAACTGAATGAGAA 1932  
Db 625 GlyPheLeuProValLeuGlyIleSerValIleAlaIleIleGlnThrGlnLysPheGlnHis 644  
QY 1933 ACAGTTACCTTGGAACTAGTGAATGAGAGCATGCTGATGCTTAAGATGAGTACGCT 1992  
Db 645 GlnValThrLeuGlnLeuThrAspAsnGlyAlaGlyArgAspThrValLysAsnAspGly 664  
QY 1993 GTCTACTCAAGTATTTCAOAACTATGACAGCATGATGATACATGATTAAGTGGCG 2052  
Db 665 IleTyrSerArgTyrPheThrAspTyrTyrGlnLysGlnArgTyrSerLeuLysValHis 684  
QY 2053 GCTCTGGGAGAGTTAAGCCAGCAGCAGGAGAGTGATACCCAGCAGAGTGGAGCAGCG 2112  
Db 685 AlaGlnAlaArgAsnAsnThrAlaArgLeuAsnLeuArgGlnProGlnAsnLysValLeu 704  
QY 2113 TACATACCTGGCGATTTGAGATGATGATGAATCAATGCAATTCACAGACCTGAATTT 2172  
Db 705 TyrValProGlyTyrValGlnLysGlnLysIleIleLeuAsnProProArgProGlnVal 724  
QY 2173 AATAGCATGATTTCAACACAGCAAGATGTGTTTCAGACAGAACTCTGGGAGGCTCA 2232  
Db 725 LysAspAspLeuAlaLysAlaLysIleGlnAspPheSerArgLeuThrSerGlyLysSer 744  
QY 2233 TTTTGGCTTTCGATGTC---CCAAATGCTCCCATACCTGATCTCTCCACCTGGCCAA 2289  
Db 745 PheThrValSerGlyAlaProProProGlyLysAsnHisProSerValPheProProSerLys 764  
QY 2290 ATCACCAGCATGAAGCGGAAATTCACGGGCGAGCTGATTAATCTGATTCGACAGCT 2349  
Db 765 IleThrAspLeuGlnAlaLysPheLys---GluAspTyrIleGlnLeuSerThrPheAla 783  
QY 2350 CCTGGGAGTATTAATGACCATGGAACAGCTCAACATATATCATTCGAATTAAGTACAGT 2409  
Db 784 ProGlyAsnValLeuAspLysGlyLysAlaAsnSerTyrIleIleArgIleSerLysSer 803



```

OY 1513 CAGAACGCCAGTGGATGTAAGTGGACAGTATGTCGGACAGACCGTGGGAAAGACACT 1572
    ::::::::::::::::::::
DB 498 ArgAlaIglValIleThrIleAsnIglValIleProLeuAspSerThrValIleGlyAsnIleThr 517
OY 1573 TGTGTTTATATACCTGGACAAAGCAGCTCCCAATCTCTCTCGGATCCCACTGCA 1632
    ::::::::::::::::::::
DB 518 PheIleValIleThrIleMetValIleGlyIleProIleIleIleLeuIleAsnIleProIleGly 537
OY 1633 CAGAG-----CAGAGTGGCTTTGATGAGCAAA---ACACCAAAATGGGCTTCTC 1683
    ::::::::::::::::::::
DB 538 IysIleIleThrIleThrIleSerIleAspIleAspIleAspIleAspIleAspIleAspIle 557
OY 1684 CAATATCCAGGAGTGTCTAAGTGGACCTGCAATATGCAATGCTGCAAGCAAC---TCA 1740
    ::::::::::::::::::::
DB 558 GlnIleProIleIleThrIleAlaIleThrIleGlyIleThrIleIleIleIleIleIleIle 577
OY 1741 CAAACCTTGACCTGACCTGACCTGACCTGACCTGACCTGACCTGACCTGACCTGAC 1800
    ::::::::::::::::::::
DB 578 GlnIleIleIleThrIleMetValIleThrIleArgIleIleIleIleIleIleIleIle 597
OY 1801 GAGACTTCCAAAGCAAGACACACCAAGCAATCCCAATCCCAAGCTGCTGATTTATGCA 1860
    ::::::::::::::::::::
DB 598 GlyIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 617
OY 1861 AATATTCGCCAGAGAGCTCCCAATTTCTCAGGCGCAGTGTACAGCCCTGATTCATCA 1920
    ::::::::::::::::::::
DB 618 ArgValIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 637
OY 1921 GTGAATGCAAAACAGTTACCTTGACATCTGACATATGAGACAGGCTGATGCTGACT 1980
    ::::::::::::::::::::
DB 638 GlnIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 657
OY 1981 AAGGATGCGGCTGATCTACCAAGTATTTACAACTTATGACAACTGATGATGACT 2040
    ::::::::::::::::::::
DB 658 LysAsnAspGlyIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 677
OY 2041 GTAAAGTCCGGGCTCTGGAGAGTAAAGCAGCCAGCAGGAGAGTGT-----ATA 2091
    ::::::::::::::::::::
DB 678 LeuIleValIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 693
OY 2092 CCCAGCAGAGTGGACAGCTGATACCTGCTGCTGATGATGATGATGATGATGATGATG 2151
    ::::::::::::::::::::
DB 694 ArgGlnIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 713
OY 2152 AATCCACCAAGCAGTGAATTAATGAATGATGATGATGATGATGATGATGATGATGATG 2211
    ::::::::::::::::::::
DB 714 AsnProIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 733
OY 2212 AGAACATCCCTCGGAGGCTCATTTGCTGCTGATGCTGATGCTGATGCTGATGCTGAT 2271
    ::::::::::::::::::::
DB 734 ArgValIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 749
OY 2272 -----CTCTCCACCTGCGCAATTCACCGACCTGAGGCGGAAATTCAC 2316
    ::::::::::::::::::::
DB 750 GlyAspIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 769
OY 2317 GGGGGCAGCTGATTAATCTGCTGAGACAGCTCCTGGGAGATGATTAATGACATGACAA 2376
    ::::::::::::::::::::
DB 770 ---GlyAspIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 788
OY 2377 GCTCAAGTATATGATTCGATGATGATGATGATGATGATGATGATGATGATGATGAT 2436
    ::::::::::::::::::::
DB 789 AlaIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 808
OY 2437 GAATCTTCAGTAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2496
    ::::::::::::::::::::
DB 809 AsnAlaIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 828
OY 2497 TTTTGTGTTAAACGAAACATTTACTTTTGAATGACAGACAGATCTTTTCACTGAT 2556
    ::::::::::::::::::::
DB 828 PheIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 848
OY 2557 CAGGCTGTTGATTAAGTGCATGTAATTCAGAAATTCACATTCGACAGATATCTTGT 2616

```

```

DB 849 GlnAlaAspAsnIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 864
OY 2617 TTTATTTCCCAACAGACTCCCGCAGAGACACTAGTCCCTGAGGAAACGCTCTCTGT 2676
DB 865 -----GlnAlaValIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 880
OY 2677 CCTAATATTCAT---ATCAACAGCACCATTCCTGCAATTCACATTTTAA 2721
    ::::::::::::::::::::
DB 881 AspAspIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 896

RESULT 5
US-09-193-562D-30
: Sequence 30, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Fausl, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617, 0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: PRIOR FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 30
: LENGTH: 1000
: TYPE: PRT
: ORGANISM: Homo sapiens
: US-09-193-562D-30

Alignment Scores:
Pred. No.: 4,24e-189 Length: 1000
Score: 2258.50 Matches: 466
Percent Similarity: 67.18% Conservative: 140
Best Local Similarity: 51.66% Mismatches: 253
Query Match: 44.46% Indels: 43
DB: 4 Gaps: 13

US-09-049-696-18 (1-2813) x US-09-193-562D-30 (1-1000)
OY 34 TTTAAGAGTCTGCTGTTCACTTGTATCTTCACTTCTGAGAGGCGCTGATTAATCA 93
    ::::::::::::::::::::
DB 3 PheSerIleIleValIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 22
OY 94 CTCATTCACCTTAACACAAATGCTATGAGCAGCTATGCTGATGCTGATGCTGATGCTG 153
    ::::::::::::::::::::
DB 23 LeuValIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 42
OY 154 CCAGAAATGAAACACTCTATTAACAATAAAGCATGTCAGCCAGCAGCTGCTGAT 213
    ::::::::::::::::::::
DB 43 ProIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 62
OY 214 CTGTTGAAGCTACAGGAAAGCATTTTATTCATAAATGTTGCAATTTGATTCCTGAA 273
    ::::::::::::::::::::
DB 63 LeuPheIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 82
OY 274 ACATGGAACACAAAGGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 333
    ::::::::::::::::::::
DB 83 ThrIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 102
OY 334 GTTCGTTGCTGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 393
    ::::::::::::::::::::
DB 103 ValIleValIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 122
OY 394 AACTGTGAGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 453
    ::::::::::::::::::::
DB 123 GlnCysGlyAspIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 142
OY 454 TTAGCTGAATATGACACACAGGATGAGGATTTGTCATGAGTGGCTGATGATGAGG 513
    ::::::::::::::::::::
DB 143 LeuAlaIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIleIle 162

```

OY	514	GGAGATTTTGAGGATACAAATTAATGAGAAATTTACTACTATTC---AATGGAAAGATA	570
Db	163	GIYALPhenSerGIUtyrAsnValAlaSpIerProtheUtyrIleSerIarGArGAsnThrThr	182
OY	571	CAAGAGTAAGAAATGTTTCAGCAGGATTAATACGGTCAATATGATAAGAAAGATTCAGGGA	630
Db	183	GIUALtThrArgCysSerThrArgIleThrValTyrmethValLeuAsnGICySLysGly	202
OY	631	GGCAGCTCTTACACCCAAAGATGCACATTCATTAATAAAGTAACAGAGCTTATGAAAAAGA	690
Db	203	AlaSerCysIleAlaArgProPhoArgArgAspSerGIlnhrgIeuUtyrGlnAlaLys	222
OY	691	TGTAGATTGTGTTCGCAATCCCGGCAACAGGAAAGGCTCTTAATGTTTCAGACACT	750
Db	223	CysThrPheIleProLysArgSerGIlnhrgAlaLysGIleSerIleValAlaPheMetGlnAsn	242
OY	751	GTTGATTTATATAGTTGAATTTCTGTACAGAAACCAACAAAGAGCTCCAAACAG	810
Db	243	LeuAspSerValIlnhrgIurPheCysThrGIlnhrgIleThrIleAsnLysGlnValaProAsnLeu	262
OY	811	CAAAATCAAAAATGCATCTCCGAAGCACAATGGGAAGTATCCGATTTCTGAGACTTT	870
Db	263	TyrIlnhrgLysMetCysAsnIlnhrgSerThrTrpAspValIleMetSerSerGlnAspPhe	282
OY	871	AAGAAACCACTCCCTATGACA---ACACAGCCACCAATCCGACCTTCATTCGTCGACG	927
Db	283	GlnIlnhrgSerProMetThrGIlnhrgIleAsnLeuProArgProThrPheSerIleuLys	302
OY	928	ATTGGACAAAGAAATGTGTGTTTATAGTCCTTGACAAATCTGGAAGCATGGCGACTGTAC	987
Db	303	SerLysGlnArgValValCysLeuValLeuAspLysSerGIlySerMetAsnAlaGlnAsp	322
OY	988	CGCCTCAATGCATGAAATCAAGCAGGCCACCTTTCCCTGTCGACAGCTGAAGTGAAGG	1047
Db	323	ArgLeuPheArgMetAsnGlnAlaAlaGlnIleUtyrLeuIleGlnIleLeuGlnLysGly	342
OY	1048	TCCGGGGTGGAGGAGACATTTGACAGTGGCCGACGTCGCGCAATGTCAAAGTAACTCATACG	1107
Db	343	SerLeuValGIlyLeuValIlnhrgAspSerPheAlaLysIleGIleInSerLysIleuLys	362
OY	1108	ATAAACAAGTGCAGCTGCACAGGACACACTGCCCAAAAGATTAAGCTTCGACAGCTTCAGGA	1167
Db	363	IleIleAspAspAsnThrTyrGlnLysIleThrAlaAsnLeuProGlnIlnhrgAlaSpGIly	382
OY	1168	GGGAGCTGCATCTGCACGGGGCTTCGATCGGCAATTAAGTGTGTGATTT---AGGAAGAAATAT	1224
Db	383	GIUtyrSerIleCysArgGIlyLeuLysAlaGlyPheGlnAlaIleProGlnSerAsnGln	402
OY	1225	CCAACTGATGGATGAATTAATGGGTCGTCGTCGACGAGGAGGGAAGACAAACATTAAGTGGG	1288
Db	403	SerThrPheGIlySerGIlyIleIleLeuLeuThrAspGIlyGlnAspArgGIlnIleSerLeu	422
OY	1285	TGCTTTACAGAGGTCAAAACAAAGTGGTGCATCATCCACACAGTGCCTTTGGGGGCTCT	1344
Db	423	CysPheGIlyGlnValLysGlnSerGIlylnhrgValIleIlnhrgIleAlaLeuGIlyProSer	442
OY	1345	GCAGCTCAAGACTAGCAGGAGCTGCCAAATGACAGA-----1383	
Db	443	AlaAspGIlnhrgIeuGlnUtyrLeuSerAsnMetThrGIlyLeuIlnhrgGIlyIlnhrgCysTyr	462
OY	1384	-----GGTTTACAGACATATCTTTCA	1404
Db	463	ThrGlnSerSerTyrSerAlaGlyLysPheIlePheCysGlnIlnhrgPheGlyAlaIlnhrg	482
OY	1405	GATCAAAATTCAGAAACATGGCGGCTCATGATAGCTTTGGGGGCGGCTTCATCAGAAATGA	1466
Db	483	LysAsnIle-----AsnGIlyLeuIleAspAlaPheSerArgIleSerSerArgSerGIly	500
OY	1465	GCTGTCTCTCAGCGCTTCATCAGCTTGAAGTGAAGTGAAGGATTAAGCTCCAGAAACAGCAG	1524
Db	501	SerIleSerGIlnhrgIlnhrgIeuGlnIleuGlnUtyrLysThrLeuAsnIlnhrgAlaLysLys	520
OY	1525	TGGATGAATGGCAGTGAATGATCGTGGACAGACACCGTGGAAAGGACATTTGTTCTTATTC	1584

[illegible]

Db 874 AlaasnaValThrSerGluValSerAsnIleAlaGlnIleThrAsnDheileProProGln 893  
 Oy 2632 ACTCCG 2637  
 Db 894 GluPro 895  
 RESULT 6  
 US-09-193-562D-11  
 ; Sequence 11, Application US/09193562D  
 ; Patent No. 6309857  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Pauli, Benedicht U.  
 ; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 ; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 ; FILE REFERENCE: 18617.0052  
 ; CURRENT APPLICATION NUMBER: US/09/193,562D  
 ; CURRENT FILING DATE: 1998-11-17  
 ; PRIOR APPLICATION NUMBER: US/60/065,922  
 ; PRIOR FILING DATE: 1997-11-17  
 ; NUMBER OF SEQ ID NOS: 47  
 ; SEQ ID NO 11  
 ; LENGTH: 795  
 ; TYPE: PRT  
 ; ORGANISM: Unknown  
 ; FEATURE:  
 ; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells  
 US-09-193-562D-11  
 Alignment Scores:  
 Pred. No.: 1.78e-177 Length: 795  
 Score: 2125.00 Matches: 425  
 Percent Similarity: 69.62% Conservative: 125  
 Best Local Similarity: 53.80% Mismatches: 224  
 Query Match: 41.83% Indels: 16  
 Gaps: 11  
 Db: 4  
 US-09-049-696-18 (1-2813) x US-09-193-562D-11 (1-795)  
 Oy 46 GGTTCATCTGATGTTACCTTCAGAAAGGAGGCGCCAGTAATTCACATTCAGTCG 105  
 Db 8 ILeuPheLeuThrLeuHisLeuLeuProGly--MetLysSerSerMetValAsnLeu 26  
 Oy 106 AACACAAATGGCTTAAAGCATGTTGCTGTAATGACCCCAATGTCGAGATGAA 165  
 Db 27 ILeaAsnGlyTyraSpIyIleValIleAlaIleAsnProSerValProGluAspGlu 46  
 Oy 166 ACACATCATCAACAATAAAGACATGTCGACCCAGGACATCTCTGATCTGTTGAAGT 225  
 Db 47 LysIleuIleGluAsnIleLysGluMetValThrGluAlaSerThrTyrrLeuPheHisAla 66  
 Oy 226 ACAGGAAGCGATTTATTTCAAAAATGTTGCCATTTTGATTCCTGAACATGGAAGAA 285  
 Db 67 ThrLysArgValTyrrPheArgAsnValSerIleLeuIleProMetThrTrpLysSer 86  
 Oy 286 AAGGCTGACTATGAGACCAAAATGTCAGACTCAAAAATGCTGATGTTGCTGCTGCT 345  
 Db 87 LysSerGluTyrrPheIleProLysGlnGluSerTyrrAspGlnAlaAspValIleValAla 106  
 Oy 346 GAGTCTACTCTCCAGGATGATGAACCTTACACTGACGACAGATGGGCACTGTGGAG 405  
 Db 107 AsnProTyrrLeuLysTyrrLysAspProTyrrThrLeuGlnTyrrGlyAspGlyGlu 126  
 Oy 406 AAGGGTGAAGAGATCACCCTCCTGATTTTCATTTGCGAGAAAAAGTTAGCTGAAT 465  
 Db 127 LysGlyLysTyrrIleHisPheThrProAsnPheLeuThrAsnAsnDheHisIleTyrr 146  
 Oy 466 GACCAACAAGTAGGAGCATTTGCTCAATGATGAGGCTCATCTAGATGGAGATATTGAC 525  
 Db 147 GlySerArgGlyArgValPheValHisGluTrpAlaHisLeuArgTrpIlePheAsp 166  
 Oy 526 GAGTACAAATTAATGATGAGAAATTTACTTATCC--AATGGAAGAAATTAACAGCAGTA 582  
 Db 167 GluTyrrAsnValAspGlnProPheTyrrIleSerArgLysAsnThrIleGluAlaThrArg 186

Oy 583 TGTTCAGAGATATTACTGTTACAAATGTAAGTA---AAGAAGTCCAGGAGCAGCTGT 639  
 Db 187 CysSerThrHisIleThrGlyIleAsnValValPheLysLysCysProIlyLysCys 206  
 Oy 640 TACACCAAAAGATGCACATTCATTAAGTAAGACGACTATGAAAAAGATGTGAGTT 699  
 Db 207 IleThrSerLeuCysArgTyrrAspSerGlnThrGlyLeuTyrrGluAlaLysCysThrPhe 226  
 Oy 700 GTTCTCCAAATCCCGCCAGACGGAAGGCTTGTATATGTTTGCACAAATGTGATTC 759  
 Db 227 LeuProLysSerGlnThrAlaLysGluSerIleMetPheMetProSerLeuHisSer 246  
 Oy 760 ATAGTGAATTCGTGACAGAACAAACCAACAAAGAAAGCTCCAAACGAAATGCA 819  
 Db 247 ValThrGluPheCysThrGluTyrrHisAsnThrGluAlaProAsnLeuGlnAsnLys 266  
 Oy 820 AATGCAATCTCCAGACACATGGAAGTATCCGATTCGATTCGAGGACTTTAAGAAACC 879  
 Db 267 MetCysAsnGlyLysSerThrTrpAspValIleMetAsnSerValAspPheGlnAsnThr 286  
 Oy 880 ACTCTATAGACA-----ACACAGCCCAAAATCCACCTTTCATTCGTCAGATTGA 933  
 Db 287 SerProMetThrGluMetAsnProProThrHisProThrPheSerLeuLeuLysSerLys 306  
 Oy 934 CAAGAATTCGTGTTACTCTGACAAATGTCGGAAGATGGCGACTGTAAACGCCCTC 993  
 Db 307 GlnArgValValCysLeuValIleuAspLysSerGlySerMetSerValAspLysPheGlu 326  
 Oy 994 AATGCAATTCGATCAAGCAGGACGCTTCTCTGTCGACAGATTCAGCTGGGCTCTGG 1053  
 Db 327 PheGlnMetAsnGlnAlaIleGluLeuTyrrLeuIleGlnValIleIleLysGlySerLeu 346  
 Oy 1054 GTTGGATGCTGACATTTGATGACAGCTGCTCCCAATGTAACAAGTGAATCTATACAGAT 1113  
 Db 347 ValGlyMetValThrPheAspSerValAlaGluIleGlnAsnHisLeuThrArgIleThr 366  
 Oy 1114 AGTGGCAGTACAGGAGACACACATCCGCAAAAGTATCTGACAGCAGCTCAGAGGAG 1173  
 Db 367 AspAspAsnValTyrrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlyTyrr 386  
 Oy 1174 TCCATCTGACAGGCGCTTCGATCGGATTT---ACTGTATTAGGAAGAAATATCCACT 1230  
 Db 387 SerIleCysArgGlyLeuLysAlaGlyPheGlnAlaIleIleHisSerAspGlnSerThr 406  
 Oy 1231 GATGATCTGAATTTGCTGCTGACGATGGGGAAGACAACTTAAGTGGTCTT 1290  
 Db 407 SerGlySerGluIleIleLeuLeuThrAspGlyGluAspAsnGluIleAsnSerCysPhe 426  
 Oy 1291 AAGGAGTCAAAACAAAGTGTGCCATTCATCCACAGCTGCGTTGGGCGCTTCAGAGCT 1350  
 Db 427 GluAspValLysArgSerGlyAlaIleIleHisThrIleAlaLeuLysProSerAlaAla 446  
 Oy 1351 CAAGAAGTACAGAGAGCTGTCCAAATGACAGAGGTTTACAGACAAATGCTTCAGATCAA 1410  
 Db 447 LysGluLeuGlnThrLysSerAsnMetThrGlyTyrrArgPhePheHisAsnLysAsp 466  
 Oy 1411 GTTCAGAACAAATGCTTCATGCTTTTGGGCGCTTTCATCAGAAATGAGACTGTC 1470  
 Db 467 Ile-----ThrGlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySerIle 484  
 Oy 1471 TCTCAGCGCTTCATCAGATGAGAGTAAAGGATTAACCTCCAGAAACGACGAGGAG 1530  
 Db 485 ThrGlnGlnAlaIleIleIleuGlnSerLysAlaLeuLysIleThrGlyArgGlyAspVal 504  
 Oy 1531 AATGCAAGATGATGCTGAGACACACGCTGGGAAGACACTTTGTTCTTATCACTGG 1590  
 Db 505 AsnGlyThrValProValAspSerThrValGlyAsnAspThrPhePheValValThrTrp 524  
 Oy 1591 ACAAGCAGCCTCCCAAAATCTTCTGAGATCCCAAGTGAACAG-----AAGCAAGT 1644  
 Db 525 ThrIleGlnLysProGlnIleValIleuGlnAspProLysGlyLysLysTyrrLysThrSer 544

```

OY 1645 GGCTTGTAGTGACAAA--AACACCAAAATGGCCTTACCTCCAAATCCAGACATGCT 1701
    ||| ||||| ||| ||| ||||| ||||| ||||| ||||| ||||| |||||
Db 545 Asphelysleuaspriusleuasnilleargseralargleuclnilleproglyliala 564
OY 1702 AAGGTGGCAGCTGGAAATACAGTCG-----CAAGCAAGCCCAAAACCTTGACC 1752
    ||| ||||| ||| ||||| ||||| ||||| ||||| ||||| |||||
Db 565 Glutrhglythrprthrprthrprthrprthrprthrprthrprthrprthrprthr 584
OY 1753 CTGACGTGACGTCCCGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT 1812
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 585 Valthvalthrthrthrthrthrthrthrthrthrthrthrthrthrthrthrthr 604
OY 1813 ACAGAAAGAGACACCAAAATCCCGACCCCTGTGCTAGTTATGCAATATCCGCA 1872
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 605 Metserglnthshrlahstlyrproserprometlvaltyrvalgluvalserglu 624
OY 1873 GGAGCCCTCCCAATTCACAGGCGCCAGTCCAGCCCTGATGATGATGATGATGATG 1932
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 625 Glypheleuprovalleuglylleservallealalellelelelelelelelele 644
OY 1933 ACAGTACCTTGAACACTAGATGATGATGATGATGATGATGATGATGATGATGAT 1992
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 645 Glutvalthreuleuclutleutpraspasnlyalagllyarpsrthrvallysasnspgly 664
OY 1993 GTCTACCTACAGCTATTCACAACTTATGACACGATGATGATGATGATGATGATG 2052
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 665 lletyrseratgtyrphetrthasprtyrtyrlyasnlyarqlyrserleuvalhis 684
OY 2053 GCTCTGGAGAGAGTAAACGACGACGACGAGAGTATACCCGACAGTGGAGACCTG 2112
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 685 Alaeglinalaargasnashthralthargleuasnleuarlglnproglinsnlyvalleu 704
OY 2113 TACATACCTGCTGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 2172
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 705 Tyrtvalproglytyrvalgluasnlyllysllelelelelelelelelelelelele 724
OY 2173 AATAAGATGATGTTACACACAGCAAGCAAGTGTTCACACAAATCCTCGGAGGCTCA 2232
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 725 Lysaspaspaleualalysalalyslilegluaspheaserhlyleuthserglylser 744
OY 2233 TTTGTGCTCTGATGTC--CCAAATGCTCCATACCTGATCTCTTCCACCTGGCCAA 2289
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 745 Phehrvalserglyalaparproglyasnhsproservalphrproproserlyls 764
OY 2290 ATCACCAGACCTGAAGCGGAATTCACGGGGCAGCTCATTAATCTAGTTGGACACT 2349
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 765 lletthrleuaspheglualalyspheyls--gluasprtyrlllelelelelelelele 783
OY 2350 CCTGGGATGATTATGACCATGGAACAGCT 2379
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 784 Proglyasnvalleuaspriusglylysala 793

RESULT 7
US-09-193-562D-12
; Sequence 12, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065.922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 12
; LENGTH: 821
; TYPE: PRF
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-12

```

```

Alignment Scores:
Pred. No.: 1.81e-177 Length: 821
Score: 2125.00 Matches: 425
Percent Similarity: 69.62% Conservative: 125
Best Local Similarity: 53.80% Mismatches: 224
Query Match: 41.83% Indels: 16
DB: 4 Gaps: 11

US-09-049-696-18 (1-2813) x US-09-193-562D-12 (1-821)
OY 46 GTTTCATCTGTGATTCACCTTCTAGAAAGGCGCTGAGTAATTCATCTATTCAGCTG 105
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 8 lletpheleuthrleuhsileuaprogly--metlysSerSerMetvalasnleu 26
OY 106 AACACAAATGCGTATGAAAGCGATTCGCTGCAATGCAACCCCAAGCCCAAGATGAA 165
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 27 llesasnnglytyraspelyllevallealaleasproservalprogluaspglu 46
OY 166 ACACATTCACCAAAATTAAGACATGATGATGATGATGATGATGATGATGATGATGAT 225
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 47 Lysleuilegluasnlyllesgluemetvalthrghualaserthrtyrleuhenisala 66
OY 226 ACAGAAAGCATTTTATTCAAAATGTTGCGCATTTGATTCGGAACATGAAAGACA 285
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 67 Thrlyarqlyrvaltyrphetrthasprtyrtyrlyasnlyarqlyrserleuvalhis 86
OY 286 AAGCGTACATGATGACCAAAATCTGACCAAAATGCTGATGCTGTGCTGTGCT 345
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 87 LysSerleuhyrphelleprolysglngluserlytaspelinalaspvalillevala 106
OY 346 GAGCTACTCTCCAGTAATGATGAACCCCTACATGACAGATGAGGCACTGTGAGAG 405
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 107 AsnProtyrleuhyrtyrlyaspaspaproythrleugllytyrlyrpglysglyglu 126
OY 406 AAGGTGAAGATTCACACCTCCTGATTCATTCAGAGAAATGATGATGATGATGATGAT 465
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 127 Lysgllystyrlllehsphetrthasprtyrtyrlyasnlyarqlyrserleuvalhis 146
OY 466 GAGACCAAGATGAGGCGATTCATGATGATGATGATGATGATGATGATGATGATGAT 525
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 147 Glyserlrglyarvalphevalhisglutpralhisleuarlyrpglyllepheasr 166
OY 526 GAGTCAATATGATGCAAAATCTACTTCC--AATGGAAGATTAACAGCAAGACA 582
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 167 Glutyrasnvalaspglnpropheyrtyrlyleserarglylsasnthrllleglualatnhr 186
OY 583 TGTTCACAGGATTTACTGTGACAAATGTAGTA--AAGAAGTGTGAGGAGGACCTGT 639
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 187 Cysserthrnhstlethrnglylleasnvalvalpheylslyscysproglylsercys 206
OY 640 TACACAAAGATGCACATTCATTAAGTAACAGACATCTATGAAAAAGATGAGTTT 699
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 207 llethrserleucysargargaspserglnthrglyleuhyrghualalyscysthr 226
OY 700 GTTCTCCAAATCCCGCAGACGAGAGAGCTTCTTAATGTTTGGCAAAATCTGATTC 759
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 227 leuprolyslsSerGlnthralylsgluSerllethetmetproserleuhsSer 246
OY 760 ATAGTGAATTCGTATGACAAACAAACCAACAAAGAGCTCCAAACAAACAAATCA 819
    ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 247 Valthrghuphecystrhglylserthhisasnthrglualaprosnleuaglinslys 266
OY 820 AAATGCAATTCGCAAGACACATGGAAGTATCCGATTCGTGAGGACTTAAGAAAC 879
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 267 MetcysasnnglyllySerThrtrpaspvalillemetnsSerValasrphleghlansthr 286
OY 880 ACTGCTATGACA-----ACAGACCAACCAATCCCACTTCTGATTCGTGACATTTGA 933
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 287 SerPrometthrghlumeAsnProthrhisprothrpheserleuhyrSerlyls 306
OY 934 CAAGCAATGTGTGTAGTCTTGCCTTGACAAATCTGACAGACATGCGACTGGTAACCGCTC 993
    ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

```





Db 76 ThlysrgrValPhepheargsnllelylleulelleproalathrPlysa 95  
Qy 286 AAGGCTGACTATGTAGACACCACAAATGAGACCTACAAAATGCTGATGTTGCT 345  
Db 96 Asn---AsnnsnserlyllelyslnglnlserlyglulysAlaasnValllevalThr 114  
Qy 346 GAGCTTACTCTCCAGGTAATGATGAACCTTACACTGACAGATGGCACTGGAGAG 405  
Db 115 AsprrPtyglValanlsislglYaspsprPtythrleuInlntyrarglYsglyLys 134  
Qy 406 AAGGTAAGAGATCCACTCCATGCTGATTCATGTCAGAAAAGTTA---GCTGAA 462  
Db 135 GlulglYstgtyrlllehlserPheThrProasnPheuleuasnrasnleuThrAla6ly 154  
Qy 463 TATGACACACAAAGGTAGGCAATTTGTCATGAGTGGGCTCATGACATGGGAGATTT 522  
Db 155 TyrglyserArgrglYarglValPheValnlsiglntyrPralnlsleuArgrglYValPhe 174  
Qy 523 GACAGTACATATATGATGAGAAATTTACTTATCC---AATGGAATAATACAGCAGTA 579  
Db 175 AspInltyrAsnAsnAspLysProPheTyrlleasnlglnAsnlglnlleYValThr 194  
Qy 580 AGATGTACAGCATATATCTAGTACAAATGTAGTAAAGATGTGACGAGCAGCTGT 639  
Db 195 ArgCysSerSerAspIleThrGlyllePheVal-----CysglulYsglyProCys 211  
Qy 640 TACACCAAAAGATGCACATTCATTAAGTAACAGACTATWGAAGATGTGACTTT 699  
Db 212 ProglnglnAsnCySllelleSerLys-----LeupheLysglulYgylThrPhe 228  
Qy 700 GTTCTCCAAATCCCGCCAGCAGAGAGGCTCTAATGTTGTTGCAACAATGATGATCT 759  
Db 229 lleYrAsnserThrlnAsnAlaThrAlaserllePheMetglInserleuSer 248  
Qy 760 ATAGTGTAAATCTGTACAGAACAAACACCAACAAAGAGCTCCAAACCAAAATCA 819  
Db 249 ValValglupheCysAsnAlaSerThrlnAsnlglnlAlaProasnleuGlInsn 268  
Qy 820 AAATGCAATCTCCGAGACACATGGAGAGTCCGTGATTTGTGAGAGCTTTAAGAAAAC 879  
Db 269 MetCysSerleuArgSerAlaTrpAspVallleThrAspSerAlaAspRhnlsHisSer 288  
Qy 880 ACTCCTAG-----ACAACAGCCACCAACATCCACCTTCATCTGCTCAGATGGA 933  
Db 289 PheProMetAsnlglyThrGluleuProProProthPheSerleuValGlAla6ly 308  
Qy 934 CAAGAATGTGTGTTAGTCTTGACAAATCTGGAAGCAGCAGCAGTGGTAAACCCGCTC 993  
Db 309 AspLysValValCysleuValleuAspValSerSerLysMetAlaGlAlaAspArgleu 328  
Qy 994 AATGCACATGATCAGCAGCCAGCTTTCTGCTGACAGACATGAGCTGGGCTGCTGG 1053  
Db 329 leuGlInleuGlInAla6lyPheTyrlleuMetglInlleValglInlleHisThrPhe 348  
Qy 1054 GTTGGATGGTGCATTTGACAGAGTCTGCCATGTACAAAGTGAATGATCAAGATTAAC 1113  
Db 349 ValglYlleAlaserPheAspSerLysglYulieArgAla6lylnleuNls6lylnleuNls 368  
Qy 1114 AGTGGCAGTACAGGAGACACACTGCCCAAAAGATTAACCTGACAGCAGCTTCCAGAGGAG 1173  
Db 369 SerAsnAspAspArgLysleuValSerTyrlleuProthThrValSerAlaLysThr 388  
Qy 1174 -----TCCATCTGACAGGCGCTTGATCCGCACTTACTGATTAAGAG---AAATAT 1224  
Db 389 AspIleSerlleCysSerlleYleuLysglYpHeGlulValValGlulYsleuasnlgly 408  
Qy 1225 CCAACTGATGATTCGAATTTGCTGCTGACAGGATGGGAGAACACATTAAGTGGG 1284  
Db 409 LysAlaLysglYserValMetlleuValThrSerglYAspAspLysleuLeu6lysn 428  
Qy 1285 TGCCTTAAACGAGGTCAAAACAGTGGTGCATATCCACAGAGTGGCTTTGGGCGCTCT 1344  
Db 429 CysleuProthValleuSerSerLysThrleHisSerlleAla6lyleuLysSer 448  
Qy 1345 GCAGCTCAAGACTAGAGAGCTGTCCAAATGACAGAGGTTTACAGCATATGCTTCA 1404  
Db 449 AlaAlaProasnleuIngluleuSerArgleuThrGlYleuLysPhePheValPro 468  
Qy 1405 GATCAAGTTCAGAACCAATGGCCATCATGATGCTTTTGGGCGCTTTCATCAGAAAATGA 1464  
Db 469 AspIleSerAsnserAsnserMetlleAspAlaPheSerArglleSerSerglYThrGly 488  
Qy 1465 GCTGTCTTCAGCCCTCCATCCAGCTTGGAGATGAAGGATTAACCTCCAGAACACCCAG 1524  
Db 489 AspIlePhe6lylnlsle6lylnleuIngluleuSerThrGlYleuAsnValLysProHis 508  
Qy 1525 TGGATGAATGGCAGAGATCGTGGACAGCAGCCGTGGAAAGACACTTGTGTTTATC 1584  
Db 509 GluleuLysasnThrValnhrValAspAsnThrValGlYAsnAspIleMetPheleuVal 528  
Qy 1585 ACCTGG---ACAACGACAGCCTCCCAATTCCTCTGTGGATCCAGTGACAGAG--- 1638  
Db 529 ThrTrpInlaserglYProProglulilleleuPheAspProAspArgLysTy 548  
Qy 1639 ---CAAGTGGCTTTGTAGTGACAAAACACCAAAATGCGCTTACCTCCAAATCCAGCG 1695  
Db 549 TyrlThrAsnAsnPheThrlnAsnleuThrPheArgThrAlaserleuThrProglY 568  
Qy 1696 ATGCTTAAGGTGGCACTTGAAATACAGTCTG-----CAAGCAAGCTCACAACAC 1746  
Db 569 ThrAlaLysProglYnlsThrPthrTyThrleuAsnAsnThrlnlsHisSerleuGlAla 588  
Qy 1747 TTGACCTGACTGTACAGTCCCGCTGCTCAATGCTACCTGCTCCAAATTAACAGTACT 1806  
Db 589 leuLysValThrValThrSerArgAlaSerAsnSerAlaValProProAlaThrValGl 608  
Qy 1807 TCCAAACGAAACAGACACCAACCAATTCGCCAGCCCTGGAGTGTGAATAT 1866  
Db 609 AlaPheValGlulAspAspSerleuHisPheProHisProValMetlleYrAlaAsnVal 628  
Qy 1867 CGCCAGAGAGCTCCCAATTCAGGCGCAGAGTCCACAGCCCTGATGTAATCAGTGAAT 1926  
Db 629 LysglInlYpheygrProilleAsnAlaThrValnhrAlaThrValGlulYthr 648  
Qy 1927 GGAATAACAGTACTCTGGAATCTGATATAGGACAGAGCTGTGATCTACTAGAT 1986  
Db 649 GlYAspProValThrleuAspgleuLeuAspAspLysAla6lyAlaAspVallleLysAsn 668  
Qy 1987 GAGGCTGTACTACAGGTATTTCAACAATATGACACGAATGGTATGACAGTGAATAA 2046  
Db 669 AspLyslleYrSerArgLysPhePheSerPheAlaAlaAsnlglnYArgLysSerleuLys 688  
Qy 2047 GTGGGGCTGTGGAGAGTTAACGACGACGACGAGAGATGATCCCAAGAG----- 2100  
Db 689 ValHis-----ValAsnHisSerProSerlleSerThrProAlaHisSerlle 704  
Qy 2101 -----AGTGAACAGCATATACATACCTGCGTGGATGAGATGTAATGAATGATGA 2154  
Db 705 ProglYserlleAlaMetlleYrValProglYrThrAlaAsnlglnYAsnllle6lyMetAsn 724  
Qy 2155 CCACCAAGACCTGAATTAATGAAGATGTTCACACAAAGCAAGTGTGTTTCCAGCAGA 2214  
Db 725 AlaProArgLysSerValGlYArgAsnlglnlulnYrgLysTrp---GlyPheSerArg 743  
Qy 2215 ACATCTCTGGGAGGCTCATTTGTGGCTTGTGATGTCCCAAAATGCTCCCAATCTGATCTC 2274  
Db 744 ValSerSerglYLysSerPheSerValleuGlYAlaProAla6lyProHisProAspVal 763  
Qy 2275 TTCCCACTGGCCAAATACACGACCTGAAGCGGAATTCACGGGGGAGCTCATATAT 2334  
Db 764 PheProProCysLysllelleAspLeu6lyAla---ValLysValGlulgluleuThr 782  
Qy 2335 CTGACTTGAACAGCTCTGGGAGATGATATGACCATGGAACAGCTCCAAATATATATCAT 2394  
Db 783 leuSerTrpThrAlaProglYglulAspPheAsp6lylnlAla6lylnlAlaThrSerTyglule 802



```

OY 2395 CGAATAAGACAGATATTCCTGATCTCAGACAGACAGTCAATGATCTTCAAGTCAAT 2454
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 803 ArgMetSerLysSerLeuGlnAsnIleGlnAspAspPheAsnSmAlaIleLeuValAsn 822
OY 2455 ACACAGCTCTCATCCCAAGACCAAGCACTGAGAGAGCTTTTGTTTAAACAGAA 2514
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 823 ThrSerLysArgAsnProGlnGlnAlaGlyIleArgGluIlePheThrPheSerProGln 842
OY 2515 AACATACCTTTGAATGGCACAGAT----- 2541
      ||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 843 IleSerThr-----AsnGlyProGluHisGlnProAsnGlyIuThrHisGluSerHis 860
OY 2542 ---CTTTGATTCGATTCATGAGCTGTTCATGATGATGATGATGATGATGATGATGAT 2598
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 861 ArgIleTyrValAlaIleAlaIleAlaMetAspArgAsnSerLeuIleAsnValSerAsn 880
OY 2599 ATTGCACAGATATCTTTTATTCCTCCACAGATCCGCCAGACACCTACTGAT 2658
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 881 IleAlaGlnAlaProLeuPheIleProAsnSerAspPro---ValProAlaArgAsp 899

RESULT 9
US-08-469-667-9
; Sequence 9, Application US/08469667
; Patent No. 5733748
; GENERAL INFORMATION:
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Rosen, Craig
; TITLE OF INVENTION: Colon Specific Genes and Proteins
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,
; ADDRESSEE: Stewart & Olstein
; STREET: 6 Becker Farm Road
; CITY: Roseland
; STATE: NJ
; COUNTRY: USA
; ZIP: 07068-1739
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,667
; FILING DATE: 06-JUN-1995
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Ferraro, Gregory D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-435
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 228 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-469-667-9

Alignment Scores:
Pred. No.: 4e-97 Length: 228
Score: 1203.00 Matches: 228
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 23.68% Indels: 0
DB: 1 Gaps: 0

US-09-049-696-18 (1-2813) x US-08-469-667-9 (1-228)
OY 1993 GTCCTACTCAAGTATTTCACACTTATGACACAGATGTAGATACAGTGTAAAGTGCAG 2052
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

```

```

Db 1 ValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyArgTyrSerValIysValArg 20
OY 2053 GCTCTGGGAGAGATTACCCAGACAGAGAGTATACCAGAGAGTGAGACAG 2112
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 21 AlaLeuGlyValAlaAsnAlaAlaArgArgValIleProGlnIleSerGlyAlaLeu 40
OY 2113 TACATACCTGGCGTGAATGATGATGATGATGATGATGATGATGATGATGAT 2172
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 41 TyrIleProGlyTyrPheGluAsnAspGluIleGlnIleProAsnProAsnProGluIle 60
OY 2173 AATAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2232
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 61 AsnLysAspAspValGlnHisLysGlnValLysPheSerArgThrSerSerGlyLys 80
OY 2233 TTGTGTGCTTCATGATTCCTCCCAATGCTCCCATACCTGATCTCTCCACCTGGCCAAATC 2292
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 81 PheValAlaSerAspValProAsnAlaProIleProAsnLeuPheProGlyGlnIle 100
OY 2293 ACCGACCTGAAGCGGAAATTCACGGGGCAGTCTCATTAATCTGACCTGGACGCTCT 2352
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 101 ThrAspLeuLysAlaGluIleHisGlySerLeuIleAsnLeuThrThrAlaPro 120
OY 2353 GGGGATGATTATGACCATGACAGCTCACAAGTATATTCGATTAATGACAGTATT 2412
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 121 GlyAspPtyrAspHisGlyThrAlaHisLysTyrIleIleArgIleSerThrIle 140
OY 2413 CTGTGATCTGAGACAGATGATGATGATGATGATGATGATGATGATGATGATGAT 2472
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 141 LeuAspLeuArgAspLysPheAsnGluSerLeuGlnValAsnThrAlaLeuIlePro 160
OY 2473 AAGGAGCCCAACCTGAGAGAGCTTTTGTTTAAACAGAAACATCTTTTGAAT 2532
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 161 LysGluAlaAsnSerIleGluValIlePheLeuPheLysProGluAsnIleThrIleGluAsn 180
OY 2533 GGCACAGATCTTTCATTCCTATTCAGCTGTTCATGATGATGATGATGATGATGAT 2592
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 181 GlyThrAspLeuPheIleAlaIleGlnAlaValAspLysValAspLeuLysSerGluIle 200
OY 2593 TCCACATTCGACGATATCTTTTATTCCTCCACAGACATCCGCCAGACAGCTACT 2652
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 201 SerAsnIleAlaIleArgValSerLeuPheIleProGlnIleThrProGluIleThrProSer 220
OY 2653 CCTGATGAACGTCGCTCTCTGT 2676
      ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 221 ProAspGluThrSerAlaProCys 228

RESULT 10
US-09-224-110-9
; Sequence 9, Application US/09224110
; Patent No. 6337195
; GENERAL INFORMATION:
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Rosen, Craig
; TITLE OF INVENTION: Colon Specific Genes and Proteins
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,
; ADDRESSEE: Stewart & Olstein
; STREET: 6 Becker Farm Road
; CITY: Roseland
; STATE: NJ
; COUNTRY: USA
; ZIP: 07068-1739
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/224,110
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:

```



```

Db 101 ThrAspLeuLysAlaGluLeuHisGlySerLeuLeuAsnLeuThrPThrAlaPro 120
OY 2353 GGGGATGATTATGACCATGAGACAGCTCAGTATATCATTCGAATAGTACAGTAT 2412
Db 121 GlyAspAspTyrPheHisIleThrAlaHisLysTyrIleLeuArgLysSerThrIle 140
OY 2413 CTGATCTCAGACAGACAGTCAATGATCTTCAAGTAACTACTCTCTCATCCA 2472
Db 141 LeuAspLeuAlaArgAspLysPheAsnGluSerLeuGlnValAsnThrThrAlaLeuIlePro 160
OY 2473 AAGGAAGCCACACTGTGAGAGAGCTTTTGTAAACAGAAACATTACTTTGAAAT 2532
Db 161 LysGlnAlaAsnSerGluGlnValPheLeuPheLysProGluAsnIleThrPheGluAsn 180
OY 2533 GGCACAGATCTTTTATCTTCTATTCAGGCTGTGTGATTAAGTGTGATCTGAAATCAGAAATA 2592
Db 181 GlyThrAspLeuPheIleAlaIleGlnAlaValAspLysValAspLeuLysSerGluIle 200
OY 2593 TCACACATTCGACAGATCTTTTGTATTCCTCCACAGACTCCGCGACAGACACTAGT 2652
Db 201 SerAsnIleAlaArgValSerLeuPheIleProGlnInThrProProGluInThrProSer 220
OY 2653 CCTGATGAAGCGTCGTCCTGTGT 2676
Db 221 ProAspGluThrSerAlaProCys 228

```

## RESULT 12

```

US-09-193-562D-13
; Sequence 13, Application US/09193562D
; Patent No. 6309857

```

## GENERAL INFORMATION:

```

; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 13
; LENGTH: 342
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
-09-193-562D-13

```

## Alignment Scores:

```

Pred. No.: 1.09e-74 Length: 342
Score: 947.50 Matches: 182
Percent Similarity: 72.06% Conservative: 45
Best Local Similarity: 57.78% Mismatches: 83
Query Match: 18.65% Indels: 5
DB: 4 Gaps: 4

```

```

US-09-049-696-18 (1-2813) x US-09-193-562D-13 (1-342)

```

```

OY 46 GTGTCATCTTGATCTTACACCTTGTAGAAAGGGCCGTAGTAATTCACATTCAGCTG 105
Db 8 IleLeuPheLeuThrLeuHisIleLeuLeuProGly---MetLysSerSerMetValAsnLeu 26
OY 106 AACACAAATGCGTATGAAAGCATGTGCTGTCGATGCAAGCCCAATATGCGCAGAAATGA 165
Db 27 IleAsnAsnGlyTyrAspGlyIleValIleAlaIleAsnProSerValProGluAspGlu 46
OY 166 ACACATTCATCAACAATATGAAGCATGGAGCCAGCATCTCTGTATCTGTGAAGT 225
Db 47 LysLeuIleGluAsnIleLysGluMetValThrGluAlaSerThrTyrLeuPheHisAla 66
OY 226 ACAGGAAGCGATTTATTTCAAAATGTGGCATTTGATTTCTCGAAGCATGAAGACA 285

```

```

Db 67 ThrLysArgArgValTyrPheArgAsnValSerIleLeuIleProMetThrTyrLysSer 86
OY 286 AAGCGTACTATGTAGAGCCAAACTGTGAGACTCAAAATGCGATGCTGTGCTGCT 345
Db 87 LysSerGluTyrPheIleProLysGlnGluSerTyrAspGlnAlaAspAlaIleValAla 106
OY 346 GAGTCTACTCTCCAGATGATGACCCCTGACATGACATGACATGACATGACATGACATG 405
Db 107 AsnProTyrLeuLeuLysTyrGlyAspAspProTyrThrIleGlnInTyrGlyArgCysGlyGlu 126
OY 406 AAGGTGAAAGATCCACCTCCTGATTTTCATTCGACGAGAAAGTAACTGATGATAT 465
Db 127 LysGlyLysTyrIleHisPheThrProAsnPheLeuThrAsnAsnPheHisIleTyr 146
OY 466 GGACCAACAAGTAGGCGATTTGTCATGATGAGTGGCTATCTGCAATGGGAGATATTAC 525
Db 147 GlySerArgGlyArgValPheValHisGluTyrPalaHisLysLeuArgTyrPdyLysPheAsp 166
OY 526 GAGTACAAATATGATGACAAATTTCTACTATCC---AATGGAAGATACAGCAGTAA 582
Db 167 GluTyrAsnValAspGlnProPheTyrIleSerArgLysAsnThrIleGlnAlaThrArg 186
OY 583 TGTCAGCAGGTATTACTGTGATCAAAATGTAGTA---AAGAGTGTACGGAGCAGCTGT 639
Db 187 CysSerThrHisIleThrGlyIleAsnValValPheLysCysProGlyGlySerCys 206
OY 640 TACACCAAAAGTGCACATTCATTAAGTAACAGAGCTATGAAAAAGATGTAGTT 699
Db 207 IleThrSerLeuCysArgArgAspSerGlnThrGlyLeuTyrGluAlaLysCysThrPhe 226
OY 700 GTTCTCCAAATCCCGCAGCAGGAGGAGGCTGTATATGTTTGCACAAACATGTATCT 759
Db 227 LeuProLysLysSerGlnThrAlaLysGluSerIleMetPheMetProSerLeuHisSer 246
OY 760 ATAGTTGAATTCGTACAGAACAAACCAACAAAGAGCTCCAAACAGCAAAATCA 819
Db 247 ValThrGluPheCysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLys 266
OY 820 AAATGCATTCGCAAGACACATGAGATGATCCGTATCTGAGACGCTTTAAGAAACC 879
Db 267 MetCysAsnGlyLysSerThrTyrAspValIleMetAsnSerValAspPheGlnAsnThr 286
OY 880 ACTCCTATGACA-----ACACAGCCACCAAAATCCACCTCTCATGCGAGTGTGA 933
Db 287 SerProMetThrGluMetAsnProProThrHisProThrPheSerLeuLeuLysSerLys 306
OY 934 CAAGAAATGTGTGTGTAGTCTTGACAAATCTGGAGACATGGCG 978
Db 307 GlnArgValValCysLeuValLeuAspLysSerGlySerMetSer 321

```

## RESULT 13

```

US-09-193-562D-3
; Sequence 3, Application US/09193562D
; Patent No. 6309857

```

## GENERAL INFORMATION:

```

; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 3
; LENGTH: 203
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 associated protein from bovine endothelial cells
US-09-193-562D-3

```

## Alignment Scores:



```

Db 708 ThrValLysAspAlaThrAlaAsnAspAlaAspLysLysValAlaThrValLysAspVal 727
OY 1330 GCTTTGGGGCCCTCTGCTCAAGAACTAGAGAGCTGTCCAAATGACAGAGAGTTTA 1389
Db 728 AlaThrAlaIleLysSerIleAlaAlaThrPheValLysThrGluAsnLeuThrSerIle 747
OY 1390 CAGACATATGCTTCAGATCAAGTTCAGACAAATGCGCTCATTTGATGCTTTGGGCGCTT 1449
Db 748 Asp-----GluAspAsnProThrAspAsnGlyLysAspAsp-----AlaLeu 761
OY 1450 TCATCAGAAAT-----GGAGCTGTCTCTCAGCGCTCCACGCTTCAGCTTGAGAGT 1497
Db 762 LysAlaGlyAspThrLeuThrPheLysAlaGlyLysAsnLeuLysValLysAspGly 781
OY 1498 AAGGAGTTTAACTC-----CAGAACAGCGCACTGATGATGATGATGATGATGATG 1548
Db 782 LysAsnIleThrPheAspLeuAlaLysAsnLeuGluValLysThrAlaLysValSerAsp 801
OY 1549 GACAGCAGCGGTGGAGAGAGACACTTTCTTATCAGCTGGACAGCAGCAGCTCCCAA 1608
Db 802 ThrLeuThrIleGlyLysAsnThr-----ProThrGlyGlyThrThrAlaThrProLys 819
OY 1609 ATC----- 1611
Db 820 ValAsnIleThrSerThrAlaAspGlyLeuAsnPheAlaLysGluThrAlaAspAlaSer 839
OY 1612 -----CTTCTCGGATGCCAGTGGACAG 1635
Db 840 GlySerLysAsnValTyrLeuLysGlyIleAlaThrThrLeuThrGluProSerAlaGly 859
OY 1636 AAGCAAGTGCGTTGTA-----GTGCAAAAACACCAAAATGGCCCTACCTCCAA 1686
Db 860 AlaLysSerSerHisValAspLeuAsnValAspAlaThrLysLysSerAsnAlaAlaSer 879
OY 1687 ATCCAGCAGCATTCCTAAGGTTGGCACTTGGAATACAGTCTGCACAGCAAGCTCACAAAC 1746
Db 880 IleGluAspValIleuArgLysGly-----TyrAsnIleGluLysAsnGlyAsnAsn 896
OY 1747 TTGACCCCTACGTCAAGCCCGCTGCGTCAATGCTAC-----CTGCGT 1791
Db 897 ValAspTyrValAlaThrTyrAspThrValAlaAsnPheThrAspAspSerThrGlyThrThr 916
OY 1792 CCAATTACAGTCACTCCAAAAGCAAGACAGACAGCAAAATGCCAGCCCTCGGA 1851
Db 917 ThrValThrValThrGluLysAlaAspGlyLysGly----- 928
OY 1852 GTTATGCAAAATATCGCCAGAGAGCTCCCAATTCAGAGCGCAGTGTCAAGCCCTG 1911
Db 929 -----AlaAspValLysIleGlyLys-----ThrSerVal 939
OY 1912 ATTGAATCGATGATGAAAAACAGTTACC-----TTGGAATCTAGTGAATAGAGCAGGT 1968
Db 940 IleLysAspHisAsnGlyLysLeuPheThrGlyLysAspLeuLysAspAlaAsnGly 959
OY 1969 GCTGATGCTACTAGAGATGAGGT-----GTCACTCAAGGTAT 2007
Db 960 AlaThrValSerGluAspAspGlyLysAspThrGlyThrGlyLeuValThrAlaLys--- 978
OY 2008 TTCACAACTATGACAGCAATGTAATGTAATGTAATGTAATGTAATGTAATGTAATGTA 2061
Db 979 ---ThrValIleAspAlaValAlaLysSerGlyTyrPargValThrGlyLysGlyAlaThr 997
OY 2062 -----GGAGTTAAGCAGCAGCAGAGAGAGTATACCCAGCAGAGT 2103
Db 998 AlaGluThrGlyAlaThrAlaValAlaValAsnAlaGluValThrValThrSerGlyThr 1017
OY 2104 GGAGCACTGTACATCTGCTGAGTGTGAGATGATGAATGCAATGCAATGCAATGCAATG 2163
Db 1018 SerValAsnPheLysAsnGly-----AsnAlaThrThr 1028
OY 2164 CCTGAATTAATAGAT-----GATGTT----- 2187

```

```

Db 1029 AlaThrValSerLysAspAsnGlyAsnIleAsnValLysTyrAspValAlaValGlyAsp 1048
OY 2188 -----CAACACAAAGCAAGTGTGTTTCAGAGAAATCC-----TCG 2223
Db 1049 GlyLeuLysIleGlyAspAspLysLysIleValAlaAspThrThrThrLeuThrValThr 1068
OY 2224 GGAGCTCAATTTGTG-----GCTTCGATGTCCTCCAAATGCTCCATTAATGAT 2271
Db 1069 GlyGlyLysValSerValProAlaGlyAlaAsnSerValAsnAsn----- 1083
OY 2272 CTCTTCCACCTGGCCAAATACCGACCTGAAGCGGAAATTCACGCGGCGAGTCTCAT 2331
Db 1084 -----AsnLysLysLeuValAlaAsnAlaGluGlyLeuAlaThrAlaLeuAsn 1098
OY 2332 AATCTGACTTGCACAGCTCTCGGGATGATTAAGACCAATGA 2373
Db 1099 AsnLeuSerThrThrAlaLysAlaAspLysTyrAlaAspGly 1112

RESULT 15
US-08-409-995-4
/ Sequence 4, Application US/08409995
/ Patent No. 5646259
/ GENERAL INFORMATION:
/ APPLICANT: Barenkamp, Stephen I.
/ APPLICANT: St. Geme III, Joseph W.
/ TITLE OF INVENTION: Haemophilus Adhesion Proteins
/ NUMBER OF SEQUENCES: 6
/ CORRESPONDENCE ADDRESS:
/ ADDRESSER: Flehr, Hohbach, Test, Albritton & Herbert
/ STREET: Four Embarcadero Center, Suite 3400
/ CITY: San Francisco
/ STATE: CA
/ COUNTRY: USA
/ ZIP: 94111-4187
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/409,995
/ FILING DATE: 24-MAR-1995
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Silva, Robin M.
/ REGISTRATION NUMBER: 38,304
/ REFERENCE/DOCKET NUMBER: A-61053/RET
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 781-1989
/ TELEFAX: (415) 398-3249
/ TELEX: 910 277299
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 1912 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: double
/ TOPOLOGY: unknown
/ US-08-409-995-4

Alignment Scores:
Pred. No.: 0.00806 Length: 1912
Score: 141.50 Matches: 181
Percent Similarity: 31.95% Conserves: 128
Best Local Similarity: 18.72% Mismatches: 371
Query Match: 2.79% Indels: 288
DB: 1 Gaps: 44

US-09-049-696-18 (1-2813) x US-08-409-995-4 (1-1912)
OY 274 ACATGGAAGACAAAGCTGACTATGTGAGACCAAAATTTGAGACCTTACAAAAATGCTGAT 333
Db 428 SerTrpLysAlaLysAlaGlu-----AlaAsp 436

```

```
QY 334 GTTCTGGTGTGAGTCTACTCTCCAGTAATGATGACCCCTACACTGAGCAGATGGCG 393
Db 437 -----ThrAspGlyAlaLeuGlnGlyIleSerLysAspGlnGlyVal 450
QY 394 AACGTGGAGGAAGGTTGAAAGGATCCACTCTCTCTGATTTCAGCAGAAAAG 453
Db 451 LysAlaGlyGlu-----ThrValThrPheLysAlaGlyLysAsn 463
QY 454 TTACTGATATGATGACCAAGTGGGCAATTGTCATGAG----- 495
Db 464 Leu---LysValLysGlnAspGlyAlaAsnPheThrLysLeuGlnAspAlaLeuThr 482
QY 496 ---TGGGCTCATCTACGATGGGAGTATTGACGAGTACATAATGATGAAAATTCTAC 552
Db 483 GlyLeuThrSerLleThrLeuGlyLysThrAsnGlyLysAsnAspAlaLysThrVal 502
QY 553 TTATCC---AATGGAAGAAATTCACAGCAGTAAAGTTCACAGCAGTATCTGTTACAAT 609
Db 503 IleAsnLysAspGlyLeuThrLleThrProAlaGlyLysGlyLysThrGlyThrAsn 522
QY 610 GTAGTAAAGAAGTGTGAGGAGCGAGCTGTACACCAAAAGATGCACATTCATAAAGTA 669
Db 523 ThrLleSerValThrLysAspGlyLleLysAlaGlyAsnLysAlaLleThrAsnValAla 542
QY 670 ACAGGACTC---TATGAAAAAGATGTGAGTTGTTCTCCAAATCCGCGCAGCAGAG 723
Db 543 SerGlyLeuThrGlnAlaLysAspAlaAsnPheAspValLleuAsnAsnSerAlaThrAsp 562
QY 724 AAGGCTCTATATGTTTGCAACACATGTGATCTATAGTTGAATTCGTACGAACA 783
Db 563 -----LeuAsnArgHisValGlnAspAlaLysGlyLysLeu----- 575
QY 784 AACCCAAACAAAGAGCTCCAAACACAGCAAAATCAAAATGCAATCTCCGAAGACATGG 843
Db 576 AsnLeuAsnGlnLysAsnAlaAsnLysGln----- 585
QY 844 GAAGTGTCCGTGATCTGAGGACTTTAAGAAAAACACTCCATGACACAGACACCA 903
Db 586 -----ProLeuValThrAspSerThr 592
QY 904 AATCCACCTTCATTCATTCGTCGAGATGTCGAAAGATTTGTTGTTAGTCTTGACAAA 963
Db 593 AlaAlaThrValGlyAspLeu-----ArgLysLeuGlyTrpValLysThrLys 609
QY 964 TCTGGAAGCATGAGCATGTGTAACCGCCCAATGCAATGCAAGCAGGCGCTTTTC 1023
Db 610 AsnGly-----ThrLysGlnGlnSerAsnGlnValLysGlnAlaAspGlnVal--- 625
QY 1024 CTGCTGCAAGCAGTGGAGCTGGGGTCTGGGGTGGAGTGTGACATTTGACAGTGTGCC 1083
Db 626 -----LeuPheThrGlyAlaGlyAlaAlaThrValThrSerLysSer 639
QY 1084 CATGTACAAAGTGAACCTACATACAGATTAACAGTGGC----- 1119
Db 640 GlnAsnGlyLysHisThrLleThrValSerValAlaGlnThrLysAlaAspCysGlyLeu 659
QY 1120 ---AGTACAGGAGCAGACATCGCCAAAAGATTACCT----- 1152
Db 660 GlnLysAspGlyAspThrLleLysLysLeuLysValAspAsnGlnAsnThrAspAsnValLeu 679
QY 1153 GCAGCAGCTTCAGGAGGAGCGCTCCATCTGACGCGGCTTCGATCGGATTTACTGTGATT 1212
Db 680 ThrValGlyLysAsnGlyThrAlaValThrLysGly-----GlyPheGlnThrVal 696
QY 1213 AGGAAGAAATATCCAACTGATGATCGAATTTGCTGCTGACGAGATGGGGAAGACAA 1272
Db 697 ---LysThrGlyAlaThrAspAlaAspArg-----GlyLysValThr 709
QY 1273 ACTATAAGTGGTGTCTTAAGAGAGTAAACAAAGTGTGTCATCATCCACAGCGCT 1332
Db 710 ValLysAspAlaThrAlaAsnAspAlaAspLysLysValAlaThrValLysAspValAla 729
QY 1333 TTGGGGCCCTCTGACGCTCAAGAACTAGAGAGCTGTCCAAAATGACAGGAGGTTTACAG 1392

Db 730 ThrAlaLleAsnSerAlaAlaThrPheValLysThrGlnAsnLeuThrThrSerLleAsp 749
QY 1393 ACATATGCTTCAGATCAAGTTCAGAACAAATGCGCTCATGCTTTTGGGCGCCTTTCA 1452
Db 750 -----GlnAspAsnProThrAspAsnGlyLysAspAsp-----AlaLeuLys 763
QY 1453 TCAGGAAT-----GGAGCTGTCTCAGCGCTCCATCCAGCTTGAGAGTAA 1500
Db 764 AlaGlyAspThrLeuThrPheLysAlaGlyLysAsnLeuLysValLysAspGlyLys 783
QY 1501 GGATTAACCTC-----CAGAACAGCCAGTGAATGCAACAGTATCGAGAC 1551
Db 784 AsnLleThrPheAspLeuAlaLysAsnLeuGlnValLysThrAlaLysValSerAspThr 803
QY 1552 AGCACCGTGGGAAGACACTTTGTTCTTATCATCCCTGGACAAACGACCTCCCAATC 1611
Db 804 LeuThrLleGlyLysAsnThr-----ProThrGlyLysThrThrAlaThrProLysVal 821
QY 1611 ----- 1611
Db 822 AsnLleThrSerThrAlaAspGlyLysAsnPheAlaLysGlnThrAlaAspAlaSerGly 841
QY 1612 -----CTTCTCTGGAGTCCAGTGGACAGAG 1638
Db 842 SerLysAsnValTyrlleuLysGlyLleAlaThrThrLeuThrGlnProSerAlaGlyAla 861
QY 1639 CAAGTGCGCTTTGTA-----GTGGACAAAACCAAAATGGCTCTCCATCCAAATC 1689
Db 862 LysSerSerHisValAspLeuAsnValAspAlaThrLysLysSerAsnAlaLysSerLle 881
QY 1690 CCAGGCACTGCTAAGTGTGGCACTTGGAATATACAGTCCGACCAACCAACCTTGG 1749
Db 882 GlnAspValLeuThrGlnAlaGly-----TrpAsnLleGlnLysGlnLysAsnVal 898
QY 1750 ACCCTGACTGACAGTCCCGCTCCCATGCTAC-----CTGCCTCA 1794
Db 899 AspTyrlValAlaThrTyrlAspThrValAsnPheThrAspSerThrGlyThrThr 918
QY 1795 ATTAGAGTGACTTCCAAAGCAAGACAGACACGACCAATTCGCCAGCCTCGTAGTT 1854
Db 919 ValThrValThrGlnLysAlaAspGlyLysGly----- 929
QY 1855 TATGCAATATTCGCCAAGAGCGCTCCCAATTCAGAGGCCAGTGTACAGCGCTGATT 1914
Db 930 ---AlaAspValLysLleGlyAlaLys-----ThrSerValLle 941
QY 1915 GAATCAGTGAATGAAAAACAGTTACC---TTGCAACTACTGGAATATGAGCAGCGTCT 1971
Db 942 LysAspHisAsnGlyLysLysLeuPheThrGlyLysAspLeuLysAspAlaAsnGlyAla 961
QY 1972 GATGCTACTAAGATGACGCT-----CTTACCTCAAGTATTTC 2010
Db 962 ThrValSerGlnAspAspGlyLysAspThrGlyThrGlyLeuValThrAlaLys----- 979
QY 2011 ACAACTTATGACAGCAATGATATACAGTGTAAAGTGGCGGCTCTGGGA----- 2061
Db 980 ThrValLleAspAlaValAsnLysSerGlyTrpArgValThrGlyGlnGlyAlaThrAla 999
QY 2062 -----GGAGTTAAGCAGCCAGCAGAGAGAGTATACCCAGCAGAGTGA 2106
Db 1000 GlnThrGlyAlaThrAlaValAsnAlaGlyAsnAlaGlnThrValThrSerGlyThrSer 1019
QY 2107 GCAGTGTACTACTGCTGGCTGGATTTGAGATGATGAATATACATGCAATCCACCAAGCT 2166
Db 1020 ValAsnPheLysAsnGly-----AsnAlaThrThrAla 1030
QY 2167 GAATTAATTAAGAGT-----GATGTT----- 2187
Db 1031 ThrValSerLysAspAsnGlnLysValLysValLysValLysValLysValLysVal 1050
QY 2188 -----CACCAAGCAAGTGTGTTTCAGCAGACATCC-----TCGGGA 2226
```

```
Db 1051 leuylsileglyaspaspyslysllevalalaaspThrThrleuthrValThnrgly 1070
QY 2227 GGCCTATTGTG-----GCTTGTGATGCCAAATGCTCCCATACCTGATCTC 2274
    |||
Db 1071 GlyLysValSerValProAlaGlyAlaAsnSerValAsnAsn----- 1084
QY 2275 TTCACACCTGGCCAAATCACGACCTGAAGGAAATTCACGGGGCAGTCTCATTAAT 2334
    |||
Db 1085 -----AsnLysLysLeuValAsnAlaGluGlyLeuAlaThrAlaLeuAsnAsn 1100
    |||
QY 2335 CTGACTTGACAGCTCTGGGAGATGATTATGACCATGGAACAGCTCACAAATATATC--- 2391
    |||
Db 1101 leuSerTrpThrAlaLysAlaaspLysTyrAlaaspGlyLusSerGluGlyuThrasp 1120
    |||
QY 2392 -----ATTCGAATAGT 2403
    |||
Db 1121 GluGluValLysAlaGlyAspLysValThrPheLysAlaGlyLysAsnLeuLysValLys 1140
    |||
QY 2404 ACAAGTATCTTGATCTGAGACAGACAAATGCAATGATCTTCAAGTGAATACTAGTCT 2463
    |||
Db 1141 GlnSerGluLysAspPheThrLysSerLeuGlnAspThrLeuThrGlyLeuThrSerIle 1160
    |||
QY 2464 CTCATCCCAAGAACCAAC-----TCTGAGGAAGTCTTTTGTATTAAACAGAAAAC 2517
    |||
Db 1161 ThrLeuGlyGlyThrAlaAsnGlyArgAsnAspThrGlyThrValIleAsnLysaspGly 1180
    |||
QY 2518 ATTACTTT-----GAAATGGCACAGAT 2541
    |||
Db 1181 leuThrIleThrLeuAlaAsnGlyAlaAlaGlyThrAspAlaSerAsnGlyAsnThr 1200
    |||
QY 2542 CTTTCATTTGCTATTCAGGCTGTGTATAA-GGTCGATCTGAATCAGAAATATCCACAT 2600
    |||
Db 1201 IleSerValThrLysAspGlyIleSerAlaGlyAsnLysGluIleThrAsnValLys--- 1219
    |||
QY 2601 TGCACGAGTATCTTTGTTATTCTCCACAGACTCCGCCAGAGACACCTAGTCTGATGA 2660
    |||
Db 1220 ---SerAlaLeuLysThrTyrLysAspThrGlnAsnThrAlaAspGlu----- 1234
    |||
QY 2661 AACGTCGTGCTCTTGCCATATATCATATCAACAGCACCATCTCCGCAATCACATT 2720
    |||
Db 1235 -----ThrGlnaspLysGluPheHisAlaAlaVal 1244
    |||
QY 2721 AAAAATTATGTGAAGTGAT 2741
    |||
Db 1245 LysAsnAlaAsnGluValGlu 1251
    |||
```

Arch completed: October 17, 2002, 19:01:26  
Job time : 56.0358 secs

***This Page Blank (uspto)***



GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 3.81947 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-17

Perfect score: 106

Sequence: 1 GGCAATTCACATTTTAAAAAT.....AAATTAATCATCATCCTT 106

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Archived: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents\_NA: \*  
1: /cgn2\_6/ptodata/2/ina/5A.COMB.seq:\*  
2: /cgn2\_6/ptodata/2/ina/5B.COMB.seq:\*  
3: /cgn2\_6/ptodata/2/ina/6A.COMB.seq:\*  
4: /cgn2\_6/ptodata/2/ina/6B.COMB.seq:\*  
5: /cgn2\_6/ptodata/2/ina/PTCUTS.COMB.seq:\*  
6: /cgn2\_6/ptodata/2/ina/Backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	106	100.0	3007	4	US-09-193-562D-27
2	76.8	72.5	878	1	US-08-469-667-8
3	76.8	72.5	878	4	US-09-224-110-8
4	76.8	72.5	878	5	PCT-US95-07289-8
5	33.2	31.3	2520	2	US-08-454-557C-50
6	33.2	31.3	2520	2	US-08-340-426D-50
7	33.2	31.3	2520	2	US-08-450-673C-50
8	33.2	31.3	2520	5	US-08-125-287-5
9	28	26.4	12839	3	US-09-125-287-5
10	27.4	25.8	1123	1	US-08-700-626-2
11	27.4	25.8	1123	4	US-09-201-641-5
12	27.4	25.8	1123	4	US-09-009-217-11
13	27	25.5	13865	3	US-09-009-217-11
14	27	25.5	13865	4	US-09-009-217-11
15	26.6	25.1	2676	4	US-08-976-259-12
16	25.6	24.2	1529	3	US-09-189-760-5
17	25.6	24.2	1529	3	US-09-188-811-5
18	25.6	24.2	1529	4	US-09-514-422-5
19	25.6	24.2	2404	1	US-08-311-023-3
20	25.4	24.0	5632	4	US-09-560-594-3
21	25.2	23.8	662	4	US-08-998-416-812
22	25.2	23.8	5162	2	US-08-916-917-13
23	25.2	23.8	5162	3	US-09-225-170-13
24	25	23.6	1708	3	US-09-108-020-5
25	24.8	23.4	15062	4	US-09-004-838-89
26	24.6	23.2	1860	1	US-08-624-125-1
27	24.6	23.2	5655	2	US-08-989-478-1

28	24.6	23.2	5655	3	US-08-996-685-1	Sequence 1, Appli
29	24.6	23.2	5655	3	US-08-880-179-2	Sequence 2, Appli
30	24.6	23.2	6008	1	US-07-789-915A-5	Sequence 5, Appli
31	24.6	23.2	6008	1	US-08-005-002C-5	Sequence 5, Appli
32	24.6	23.2	6008	1	US-08-487-203A-5	Sequence 1, Appli
33	24.6	23.2	9919	3	US-08-880-179-1	Sequence 5, Appli
34	24.6	23.2	10396	1	US-08-245-809-5	Sequence 5, Appli
35	24.6	23.2	10965	1	US-08-107-748-4	Sequence 4, Appli
36	24.6	23.2	10965	5	PCT-US92-01385-4	Sequence 4, Appli
37	24.4	23.0	789	1	US-08-508-448C-14	Sequence 14, Appli
38	24.4	23.0	852	4	US-09-078-294-18	Sequence 18, Appli
39	24.4	23.0	1517	1	US-08-508-448C-15	Sequence 15, Appli
40	24.4	23.0	2494	3	US-09-189-760-1	Sequence 1, Appli
41	24.4	23.0	2494	4	US-09-514-422-1	Sequence 1, Appli
42	24.4	23.0	6142	4	US-09-514-302-1	Sequence 1, Appli
43	24.4	23.0	11811	4	US-09-078-294-7	Sequence 7, Appli
44	24.2	22.8	728	4	US-09-227-357-86	Sequence 86, Appli
45	24.2	22.8	771	4	US-09-461-697-153	Sequence 153, App

#### ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
; Sequence 27, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617 0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 27
; LENGTH: 3007
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-193-562D-27

Query Match      100.0%; Score 106; DB 4; Length 3007;
Best Local Similarity 100.0%; Pred. No. 5.8e-26;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 GGCAATTCACATTTTAAAAATTTGCGAAGTGTGAGAGAGAACTGCAGCTGTCAATAGCC 60
    |||
DB 2729 GGCAATTCACATTTTAAAAATTTGCGAAGTGTGAGAGAGAACTGCAGCTGTCAATAGCC 2788

QY 61 TAGGCGCTGAATTTTGTGAGATTAATAATTAATCATTCATCCTT 106
    |||
DB 2789 TAGGCGCTGAATTTTGTGAGATTAATAATTAATCATTCATCCTT 2834

RESULT 2
US-08-469-667-8
; Sequence 8, Application US/08469667
; Patent No. 5733748
; GENERAL INFORMATION:
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Rosen, Craig
; TITLE OF INVENTION: Colon Specific Genes and Proteins
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,
; ADDRESS: Stewart & Olstein
; STREET: 6 Becker Farm Road
; CITY: Roseland
; STATE: NJ
; COUNTRY: USA
; ZIP: 07068-1739
```

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/469,667  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
US-08-469-667-8

Query Match 72.5%; Score 76.8; DB 1; Length 878;  
Best Local Similarity 91.0%; Pred. No. 1.6e-16;  
Matches 81; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGCATTACATTTTAAATAATATGTGAGTGGATAGACAGACGCGTCAATAGCC 60  
|||||  
DB 717 GGCATTACATTTTAAATAATATGTGAGTGGATAGACAGACGCGTCAATAGNC 776  
|||||

QY 61 TAGGGCTGAATTTTGTGCAGATAAATAA 89  
|||||  
DB 777 TAGGGCTGAATTTTGTGCGGTGAATAA 805  
|||||

RESULT 3  
US-09-224-110-8  
Sequence 8, Application US/09224110  
Patent No. 6337195  
GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
APPLICANT: Rosen, Craig  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,  
ADDRESS: Stewart & Olstein  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ  
COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/224,110  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/469,667  
FILING DATE: 06-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134

REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
US-09-224-110-8

Query Match 72.5%; Score 76.8; DB 4; Length 878;  
Best Local Similarity 91.0%; Pred. No. 1.6e-16;  
Matches 81; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 GGCATTACATTTTAAATAATATGTGAGTGGATAGACAGACGCGTCAATAGCC 60  
|||||  
DB 717 GGCATTACATTTTAAATAATATGTGAGTGGATAGACAGACGCGTCAATAGNC 776  
|||||

QY 61 TAGGGCTGAATTTTGTGCAGATAAATAA 89  
|||||  
DB 777 TAGGGCTGAATTTTGTGCGGTGAATAA 805  
|||||

RESULT 4  
PCT-US95-07289-8  
Sequence 8, Application PC/TUS9507289  
GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
APPLICANT: Rosen, Craig  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,  
ADDRESS: Stewart & Olstein  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ  
COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/07289  
FILING DATE: 06-JUN-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-265  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
PCT-US95-07289-8

FILING

AY-1995

CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:  
NAME: Ludwig, Steven R.  
REGISTRATION NUMBER: 36,203  
REFERENCE/DOCKET NUMBER: 0609.3840004  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 371-2600  
TELEFAX: (202) 371-2540  
INFORMATION FOR SEQ ID NO: 50:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2520 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: both  
TOPOLOGY: both  
US-08-450-673C-50

Query Match 31.3%; Score 33.2; DB 2; Length 2520;  
Best Local Similarity 57.8%; Pred. No. 0.043;  
Matches 59; Conservative 0; Mismatches 43; Indels 0; Gaps 0;

2 GCATTACATTTTAAATATGTGAGAGTAGAGACGCTGTCAATAGCCT 61  
2412 GAACACATGCTTTAAATATGCAGTGGAGGAGGGGTGATTAACACGCAACAAAGCTA 2353  
62 AGGGCTGATTTTGTGCAGATAAATAAATTAATCATTCATC 103  
DB 2352 AAAAAAGATCCTTGATGATTAATTAACAAAGCATGATC 2311

RESULT 8  
PCT-US95-17111A-50/C  
Sequence 50, Application PC/TUS9517111A  
GENERAL INFORMATION:  
APPLICANT: de la Monte, Suzanne  
TITLE OF INVENTION: Neural Thread Protein Gene Expression and  
TITLE OF INVENTION: Detection of Alzheimer's Disease  
NUMBER OF SEQUENCES: 121  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.  
STREET: 1100 New York Avenue, Suite 600  
CITY: Washington  
STATE: D.C.  
COUNTRY: U.S.A.  
ZIP: 20005-3934  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/17111A  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/340,426  
FILING DATE: 14-NOV-1994  
ATTORNEY/AGENT INFORMATION:  
NAME: Ludwig, Steven R.  
REGISTRATION NUMBER: 36,203  
REFERENCE/DOCKET NUMBER: 0609.3840002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 371-2600  
TELEFAX: (202) 371-2540  
INFORMATION FOR SEQ ID NO: 50:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2520 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: both  
TOPOLOGY: both  
PCT-US95-17111A-50

Query Match 31.3%; Score 33.2; DB 5; Length 2520;

Best Local Similarity 57.8%; Pred. No. 0.043;  
Matches 59; Conservative 0; Mismatches 43; Indels 0; Gaps 0;

2 GCATTACATTTTAAATATGTGAGAGTAGAGACGCTGTCAATAGCCT 61  
2412 GAACACATGCTTTAAATATGCAGTGGAGGAGGGGTGATTAACACGCAACAAAGCTA 2353  
62 AGGGCTGATTTTGTGCAGATAAATAAATTAATCATTCATC 103  
DB 2352 AAAAAAGATCCTTGATGATTAATTAACAAAGCATGATC 2311

RESULT 9  
US-09-125-287-5/C  
Sequence 5, Application US/09125287B  
Patent No. 6114602  
GENERAL INFORMATION:  
APPLICANT: BARG, Rivka  
TITLE OF INVENTION: METHOD FOR THE INTRODUCTION OF GENETIC PARTHENOCAPIRY IN  
TITLE OF INVENTION: PLANTS  
FILE REFERENCE: INTRO GENETIC PARTHENOCAPIRY IN PLANTS  
CURRENT APPLICATION NUMBER: US/09/125,287B  
EARLIER FILING DATE: 1998-11-09  
EARLIER APPLICATION NUMBER: PCT/IL97/00051  
NUMBER OF SEQ ID NOS: 6  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 5  
LENGTH: 2293  
TYPE: DNA  
ORGANISM: ROLB GENE  
US-09-125-287-5

Query Match 26.4%; Score 28; DB 3; Length 2293;  
Best Local Similarity 56.5%; Pred. No. 2.1;  
Matches 52; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

5 TTCACATTTTAAATATGTGAGAGTAGAGACGCTGTCAATAGCCTAGG 64  
DB 1770 TTACGTACCAATAGTTTGTTTAAGTGGTATTAATCGATTTTAAAAAGTGAAT 1711  
65 GCTGATTTTGTGCAGATAAATAAATTAATC 96  
DB 1710 TGAATAATTTAGTGAGAGAAACAAATGAAC 1679

RESULT 10  
US-09-125-287-1/C  
Sequence 1, Application US/09125287B  
Patent No. 6114602  
GENERAL INFORMATION:  
APPLICANT: BARG, Rivka  
TITLE OF INVENTION: METHOD FOR THE INTRODUCTION OF GENETIC PARTHENOCAPIRY IN  
TITLE OF INVENTION: PLANTS  
FILE REFERENCE: INTRO GENETIC PARTHENOCAPIRY IN PLANTS  
CURRENT APPLICATION NUMBER: US/09/125,287B  
EARLIER FILING DATE: 1998-11-09  
EARLIER APPLICATION NUMBER: PCT/IL97/00051  
NUMBER OF SEQ ID NOS: 6  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 1  
LENGTH: 12839  
TYPE: DNA  
ORGANISM: TPRP-F1 GENOMIC CLONE  
FEATURE:  
NAME/KEY: unsure  
LOCATION: (5)-(11322)  
OTHER INFORMATION: "n"s are any nucleic residue  
US-09-125-287-1

```
Query Match 26.4%; Score 28; DB 3; Length 12839;
Best Local Similarity 56.5%; Pred. No. 3.5;
Matches 52; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

QY 5 TTCACATTTTAAATAATGTCGTAAGTGCAGCACTGCTCAATAGCTAG 64
DB 10709 TTACTGTAACAAATAGCTTTGTAAGTGGTAAATTAATGATTTTAAAAAGTGAAT 10650
QY 65 GCTGATTTTGTGACATTAATTAATTAATC 96
DB 10649 TGAATTTTGTGACAGAGAAACAAATGAAC 10618

RESULT 11
US-08-700-626-2
; Sequence 2, Application US/08700626
; Patent No. 5734038
; GENERAL INFORMATION:
; APPLICANT: Au-Young, Janice
; APPLICANT: Hillman, Jennifer L.
; APPLICANT: Goli, Surya K.
; TITLE OF INVENTION: NOVEL HUMAN DBI/ACBP-LIKE PROTEIN
; NUMBER OF SEQUENCES: 5
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Incyte Pharmaceuticals, Inc.
; STREET: 3174 Porter Drive
; CITY: Palo Alto
; STATE: CA
; COUNTRY: U.S.
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTA Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/700,626
; FILING DATE: Filed Herewith
; ATTORNEY/AGENT INFORMATION:
; NAME: Billings, Lucy J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0115 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-855-0555
; TELEFAX: 415-845-4166
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1123 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; IMMEDIATE SOURCE:
; LIBRARY: PGANNO701
; CLONE: 620984
; US-08-700-626-2

Query Match 25.8%; Score 27.4; DB 1; Length 1123;
Best Local Similarity 65.6%; Pred. No. 2.8;
Matches 40; Conservative 0; Mismatches 21; Indels 0; Gaps 0;

QY 33 GATAGAGAACTGCAGCTTCATATGCTAGGCTGATTTTGTGACATTAATAATAA 92
DB 973 GACTGAAACATGCAGCTCTGTATAGCATTAAGCTTCCATTAAGAAAGAACTCAAAA 1032
QY 93 A 93
DB 1033 A 1033

RESULT 12
US-09-201-641-5
; Sequence 5, Application US/09201641A
; Patent No. 6232530
; GENERAL INFORMATION:
; APPLICANT: Cunningham Jr, Francis X
; APPLICANT: Dellapenna, Dean
; TITLE OF INVENTION: Method for Regulating Carotenoid Biosynthesis in
; FILE REFERENCE: Quest 41-162
; CURRENT APPLICATION NUMBER: US/09/201,641A
; CURRENT FILING DATE: 1998-11-30
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 1887
; TYPE: DNA
; ORGANISM: Tagetes erecta
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (141)..(1688)
; OTHER INFORMATION: epsilon-cyclase
; US-09-201-641-5

Query Match 25.8%; Score 27.4; DB 4; Length 1887;
Best Local Similarity 62.3%; Pred. No. 3.2;
Matches 43; Conservative 0; Mismatches 26; Indels 0; Gaps 0;

QY 28 AAGTGATGAGAGAACTGCAGCTGTCATAGGCTGATTTTGTGACATTAATAA 87
DB 736 AAGTGAACGATTAAGTGAAGCTCCAAATGCTTAAGTCTCATAGAGTGAAGCAATA 795
QY 88 AATAAATC 96
DB 796 TCACATTC 804

RESULT 13
US-09-009-217-11
; Sequence 11, Application US/09009217
; Patent No. 6132729
; GENERAL INFORMATION:
; APPLICANT: Thorpe, Phillip E.
; APPLICANT: King, Steven W.
; APPLICANT: Gao, Boning
; TITLE OF INVENTION: COMBINED TISSUE FACTOR AND
; TITLE OF INVENTION: CHEMOTHERAPEUTIC METHODS AND COMPOSITIONS FOR COAGULATION
; TITLE OF INVENTION: AND TUMOR TREATMENT
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P. O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/009,217
; FILING DATE: Concurrently Herewith
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/042,427
; FILING DATE: 27-MAR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/036,205
; FILING DATE: 27-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,920
; FILING DATE: 22-JAN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Hibler, David W.
```

REGISTRATION NUMBER: 41,071  
REFERENCE/DOCKET NUMBER: UTSD:536  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 512/418-3000  
TELEFAX: 512/474-7577  
INFORMATION FOR SEQ. ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13865 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-09-009-217-11

Query Match 25.5%; Score 27; DB 3; Length 13865;  
Best Local Similarity 54.5%; Pred. No. 7.6;  
Matches 54; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

QY 3 CATTCACATTTTAAATATGTCAGATGAGAGACTGCAGCTGTCAATAGCCTA 62  
DB 8914 CTTTATTATTTAAAAAATTTGCATACAGTGATCCACAGAGTTCAACCATTGTTTCA 8973  
63 GGGCTGAATTTTGTCTCAGATTAATAATAATCAATTCATTA 101  
DB 8974 GGGCTCAACGTCTTGTGTTAAATAATATATTATTAA 9012

RESULT 14  
US-09-009-656-11  
Sequence 11, Application US/09009656  
Patent No. 6132730  
GENERAL INFORMATION:  
APPLICANT: Thorpe, Philip E.  
APPLICANT: King, Steven W.  
TITLE OF INVENTION: COMBINED TISSUE FACTOR AND FACTOR VIIA  
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR COAGULATION AND TUMOR  
NUMBER OF SEQUENCES: 27  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Arnold, White & Durkee  
STREET: P.O. Box 4433  
CITY: Houston  
STATE: Texas  
COUNTRY: USA  
ZIP: 77210  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/009,656  
FILING DATE: Concurrently herewith  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/042,427  
FILING DATE: 27-MAR-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/036,205  
FILING DATE: 27-JAN-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/035,920  
FILING DATE: 22-JAN-1997  
ATTORNEY/AGENT INFORMATION:  
NAME: Hibler, David W.  
REGISTRATION NUMBER: 41,071  
REFERENCE/DOCKET NUMBER: UTSD:537  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 512/418-3000  
TELEFAX: 512/474-7577  
INFORMATION FOR SEQ. ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 13865 base pairs

TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-09-009-656-11

Query Match 25.5%; Score 27; DB 3; Length 13865;  
Best Local Similarity 54.5%; Pred. No. 7.6;  
Matches 54; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

QY 3 CATTCACATTTTAAATATGTCAGATGAGAGACTGCAGCTGTCAATAGCCTA 62  
DB 8914 CTTTATTATTTAAAAAATTTGCATACAGTGATCCACAGAGTTCAACCATTGTTTCA 8973  
63 GGGCTGAATTTTGTCTCAGATTAATAATAATCAATTCATTA 101  
DB 8974 GGGCTCAACGTCTTGTGTTAAATAATATATTATTAA 9012

RESULT 15  
US-08-976-259-12/C  
Sequence 12, Application US/08976259  
Patent No. 6316609  
GENERAL INFORMATION:  
APPLICANT: Dillon, Patrick J.  
APPLICANT: Choi, Gil H.  
APPLICANT: Welch, Rodney A.  
TITLE OF INVENTION: Nucleotide Sequence of Escherichia coli  
Patent No. 6316609  
NUMBER OF SEQUENCES: 142  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.  
STREET: 1100 New York Ave, N.W., Suite 600  
CITY: Washington  
STATE: DC  
COUNTRY: USA  
ZIP: 20005-3934  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4MB storage  
COMPUTER: HP Vectra 486/33  
OPERATING SYSTEM: MSDOS version 6.2  
SOFTWARE: ASCII Text  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/976,259  
FILING DATE: Herewith  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/031,626 AND US 60/061,953  
ATTORNEY/AGENT INFORMATION:  
NAME: Steffe, Eric K.  
REGISTRATION NUMBER: 36,688  
REFERENCE/DOCKET NUMBER: 1488.0740002/EKS/CBM  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 371-2600  
TELEFAX: (202) 371-2540  
INFORMATION FOR SEQ. ID NO: 12:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 2676 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
US-08-976-259-12

Query Match 25.1%; Score 26.6; DB 4; Length 2676;  
Best Local Similarity 56.2%; Pred. No. 6.5;  
Matches 50; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

QY 5 TTTCACATTTTAAATATGTCAGATGAGAGACTGCAGCTGTCAATAGCCTA 64  
DB 730 TTTCTGATTTAAACAACCTTGAGTAGAATTAATTCATTCCTTTCTCAAGACATC 671  
QY 65 GCTGAATTTTGTCTCAGATTAATAATAATCAATTCATTA 93  
DB 670 ATCGAATTCATCTCTGATTAATTTCTATAA 642

Tue Oct 22 11:21:36 2002

us-09-049-696-17.rni

Page 7

Search completed: October 17, 2002, 11:15:09  
Job time : 12.8195 secs

---

***This Page Blank (uspto)***





Db 21 SerAsnSerLeuIleGlnLeuAsnAsnGlnGlyTyrGlnGlyIleValIleAlaIleAsp 40  
QY 145 CCCAATGTGCAGAGAAGTGAACACATCTATTCACAAATTAAGACATGGTGACCAGCA 204  
Db 41 ProAsnValProGlnAspGlnThrLeuIleGlnGlnIleLysAspMetValThrGlnAla 60  
QY 205 TCTGTGATCTGTTGTAAGCTACAGAAAGCATTTTATTTCAAAAATGTTGCCATTTTG 264  
Db 61 SerLeuTyrLeuPheGlnAlaThrGlyLysArgPheTyrPheLysAsnValAlaIleLeu 80  
QY 265 ATTCCCTGAACATGAGAGCAAAAGGCTGACATCTGAGACCAAAACTTGAGACCTACAAA 324  
Db 81 IleProGlnThrTyrPheLysAlaAspTyrValArgProLysLeuGlnThrTyrLys 100  
QY 325 AATGCTGATGTTCTGTGTGAGTCTACTCTCCAGTATGATGTAACCTTACACTGAG 384  
Db 101 AsnAlaAspValLeuValAlaGlnSerThrProProGlnAsnAspGlnProTyrThrGln 120  
QY 385 CAGATGGGCAACTGTGGAGAGAAAGGTGAAGATCCACCTCCTGATTTTCATTGCA 444  
Db 121 GlnMetGlnAsnGlyGlnGlyLysGlyLysGlyLysGlyLysLeuThrProAspPheIleAla 140  
QY 445 GGAAGAAAAGTTAGCTGAATTTGACCCCAAGGTAGGCAATTTGCCATTTGAGTGGCTCAT 504  
Db 141 GlyLysLysLeuAlaGlnTyrGlyProGlnGlyLysAlaPheValIleGlnThrAlaHis 160  
QY 505 CTACGATGGGAGATTTTGAAGATACAAATATGATGAGAAATTTCTACTTATCCATGGA 564  
Db 161 LeuArgTyrPheGlyValPheAspGlnTyrAsnAsnAspGlnLysPheTyrLeuSerAsnGly 180  
QY 565 AGAATTCACACGTAACATATGTTCAAGGATTTACTGTTCACAAATGTAGTAAAGAGTGT 624  
Db 181 ArgIleGlnAlaValAlaGlyCysSerAlaGlyIleThrGlyThrAsnValIleLysGlyCys 200  
QY 625 CAGGAGGCGAGCTGTTCACCAAAAGATGACATTCATTAAGAAACAGAGACTATGAA 684  
Db 201 GlnGlyLysTyrCysTyrThrLysArgCysThrPheAsnLysValThrGlyLeuTyrGln 220  
QY 685 AANAGATGTAGTTTGTCTCCAAATCCCGCAGACGAGAGAGGCTTCTATTAATGTTTGA 744  
Db 221 LysGlyLysGlnPheValIleGlnSerArgGlnThrGlnLysAlaSerIleMetPheAla 240  
QY 745 CAACATGTTGATTTCTATAGTGAATTTCTGTACAGAACAAACCAACAAAGAAAGCTCCA 804  
Db 241 GlnHisValAspSerIleValIleGlnPheCysThrGlnGlnAsnHisAsnLysGlnAlaPro 260  
QY 805 AACACGCAAAATCAAAATGCAATTCGCCAAGACATGGAAGAGATCCGCTGATTTGAG 864  
Db 261 AsnLysGlnAsnGlnLysCysAsnLeuArgSerThrTyrPheLysValIleArgAspSerGln 280  
QY 865 GACTTTAAGAAAACCATCTCTATGACAAACACAGCCACCAATCCACCTTCTGATGCTG 924  
Db 281 AspPheLysLysThrThrProMetThrThrGlnProProAsnProThrPheSerLeuLeu 300  
QY 925 CAGATTTGACAAAGATTTGGTGTAGTCTGACAAATCTGGAAGCATGGGAGCTGGT 984  
Db 301 GlnIleGlyGlnArgIleValCysLeuValLeuAspLysSerGlySerMetAlaThrGly 320  
QY 985 AACCGCTCAATGACTGATGCAATCAAGCAGGCACTTTTCTGCTGAGACAGTTGAGCTG 1044  
Db 321 AsnArgLeuAsnArgLeuAsnGlnAlaGlyGlnLeuPheLeuLeuGlnThrValIleLeu 340  
QY 1045 GGGTCTCTGGGTTGGAGTGTGACATTTGACAGTGTGCCCATGTACAAAGTGAACATATA 1104  
Db 341 GlySerThrPheAlaGlyMetValThrPheAspSerAlaAlaHisValGlnSerGlnLeuIle 360  
QY 1105 CAGATTAACAGTGGCAGTGACAGAGGACACACTGCCAAAAGATTACCTGCAGCAGCTTCA 1164  
Db 361 GlnIleAsnSerGlySerAspArgAspThrLeuAlaLysArgLeuProAlaAlaLaser 380  
QY 1165 GGAGGACCTGCATCTGCAGCGGCTTCGATCCGATTTACGTGATTTAGAAAGAAATAT 1224  
Db 381 GlyGlyThrSerIleCysSerGlyLeuArgSerAlaPheThrValIleArgLysLysTyr 400

---

QY 1225 CCAACTGATGGATGCTGAATTTGTGCTGTGACCGGATGGGGAAGACACACTATTAAGTGG 1284  
Db 401 ProThrAspLysSerGlnIleValLeuLeuThrAspLysGlyLysAsnThrIleSerGly 420  
QY 1285 TGCCTTAACGAGGCAAAAGTGTGCCATCATCACACAGCTGGCTTTGGGGCCCTCT 1344  
Db 421 CysPheAsnGlnValLysGlnSerGlyAlaIleIleHisThrValAlaLeuGlyProSer 440  
QY 1345 GCAGCTCAGAACTAGAGGAGCTGTCCAAAATGACAGGAGGTTTACAGACATATGCTTCA 1404  
Db 441 AlaAlaGlnGlnLeuGlnGlnLeuSerLysMetThrGlyLysLeuGlnThrTyrAlaLaser 460  
QY 1405 GATCAAGTTGAGAAATGGCTCATGATGATGCTTTTGGGCCCCCTTTCATCAGGAATATGA 1464  
Db 461 AspGlnValAlaAsnAsnGlyLeuIleAspAlaPheGlyAlaLeuSerSerGlyAsnGly 480  
QY 1465 GCTGTCTCTCAGGCTCCATCCAGCTTGAGAGTAAAGGATTAACCTCCAGAACAGCCAG 1524  
Db 481 AlaValSerGlnArgSerIleGlnLeuGlnSerLysGlyLeuThrLeuGlnAsnSerGln 500  
QY 1525 TGCATGAATGGCACAGTGAATCTGTGACAGCAGCTGGGAAAGACACTTGTGTTATC 1584  
Db 501 TrpMetAsnGlyThrValIleValAspSerThrValGlyLysAspThrLeuPheLeuIle 520  
QY 1585 ACCTGGACAGCAGCCTCCCAAAATCCTCTCTGGGATCCAGTGACAGAAAGCAAGGT 1644  
Db 521 ThrThrThrThrGlnProProGlnIleLeuLeuThrPheProSerGlyGlnLysGlnGly 540  
QY 1645 GCGTTTGTAGTGACAAAACACCAAAATGCGCTTACCTCCAAATCCAGGACTTGTAG 1704  
Db 541 GlyPheValValAspLysAsnThrLysMetAlaTyrLeuGlnIleProGlyIleAlaLys 560  
QY 1705 GTTGGCACTTGAATTAACGTCGCAAGAGTCCAAACCTTGACCTTGATGTGCAG 1764  
Db 561 ValGlyThrTyrLysTyrSerLeuGlnAlaSerSerGlnThrLeuThrLeuThrValThr 580  
QY 1765 TCCCGTGCCTCAATGCTACCTGCTCCAAATTAACAGTGCCTCCAAAAGCAAGAGAC 1824  
Db 581 SerArgAlaSerAsnAlaThrLeuProProIleThrValThrSerLysThrAsnLysAsp 600  
QY 1825 ACCAGCAAAATTCACAGCCCTGTGTAGTTTATGCAAAATTTGCGCAAGAGCCTCCCA 1884  
Db 601 ThrSerLysPheProSerProLeuValIleTyrAlaAsnIleArgGlnGlyAlaSerPro 620  
QY 1885 ATTCTCAGGCGCAGTCCACAGCCCTGATGATTCAGTGAATGGAAGAAACAGTACTTG 1944  
Db 621 IleLeuArgAlaSerValThrAlaLeuIleGlnSerValAsnGlyLysThrValThrLeu 640  
QY 1945 GAACACTGGAATTAAGAGCAGGCTGCTGATGCTACTTAAGATGACGCTTACTCAAG 2004  
Db 641 GlnLeuLeuAspAsnGlyAlaGlyAlaAspAlaThrLysAspAspGlyValIlyrSerArg 660  
QY 2005 TATTTACAACTTATGACAGAAATGATACATGATGAATGGAAGTGGGCTGTGGAGGA 2064  
Db 661 TyrPheThrThrTyrAspThrAsnGlyArgTyrSerValIleValArgAlaLeuGlyGly 680  
QY 2065 GTTAAAGCAGCAGAGGAGATGATACCCAGCAAGGAGGAGCAGCTGACTACTGGCC 2124  
Db 681 ValAsnAlaAlaArgTyrArgTyrAlaIleProGlnGlnSerGlyAlaLeuTyrIleProGly 700  
QY 2125 TGGATTTGAGAAATGAATTAATGAATGCAACCAAGCCTGAAATTAATTAAGATGAT 2184  
Db 701 TrpIleGlnAsnAspGlnIleGlnThrPheAsnProProAlaArgProGlnIleAsnLysAspArg 720  
QY 2185 GTTCAACACACAAAGTGTGTTTACAGACAAATCCTCGGAGGCTCATTTGTGGCTTCT 2244  
Db 721 ValGlnHisLysGlnValLysPheSerArgThrSerSerGlyGlySerPheValAlaSer 740  
QY 2245 GATGTCCCAAAATGCTCCCTTACTGATCTCTTCCCACTGGGCAATATCACCACTGAAAG 2304  
Db 741 AspValProAsnAlaProIleProAspLeuPheProProGlyGlnIleThrAspLeuLys 760





Dh 67 ThrIysArGArGValTyrPheArGAsnValSerIleLeuIleProMetThrTrpIysSer 86  
Oy 286 AAGGTGACTATGTGAGACCAAACTGAGACCTACAAAAATGATGTGTGGTGGT 345  
Dh 87 LysSerGIuTrpPheIleProLysGlnGlnSerTyrAspGlnAlaIleValAla 106  
Oy 346 GAGTCTACTCTCCAGTAAATGATGACACCTTACACTGAGCAGATGGCAACTGTGAGAG 405  
Dh 107 AsnProTyrLeuLysTyrGlyAspAspProTyrThrLeuGlnTyrGlyArgGlySerGlu 126  
Oy 406 AAGGTGAAGAGATCCACCTCAGCTCCTGATTTCAATTCAGAGCAAAAAGTTAGCTGAATAT 465  
Dh 127 LysGIuLysTyrIleIlePheThrProAsnPheLeuLeuThrAsnAsnPheHisIleTyr 146  
Oy 466 GGACACACAGGTAGGGGCAATTGTCCATGATGGGCTCATCTGATGGGAGATATTGAC 525  
Dh 147 GlySerArGGIuArGValPheValHisGluTrpAlaHisLeuArgTrpGlyIlePheAsp 166  
Oy 526 GAGTCAATTAATGAGAGAAATTCCTACTATCC---AATGCAAGATACAGCAGTAAAG 582  
Dh 167 GIuTyrAsnValAspGlnProPheTyrIleSerArgLysAsnThrIleGlnAlaThrArg 186  
Oy 583 TGTTCAGACGATTTACTGTGACAAATAGTAGTA---AAGAGTGTACAGGAGCAGCTGT 639  
Dh 187 CysSerThrHisIleThrGIuLysIleAsnValAlaPheLysLysCysProGlyGIuSerCys 206  
Oy 640 TACACCAAAAGATGCACATTCATTAAGTAAACGAGCTCTATGAAAAGATGTAGATT 699  
Dh 207 IleThrSerLeuCysArGArGAspSerGlnThrGIuLysTyrGlnAlaLysGlyThrPhe 226  
Oy 700 GTTCTCAATCCCGCCAGACGAGAGAGGCTTCTATATGTTCGACCAACATGTGATTCT 759  
Dh 227 LeuProLysLysSerGlnThrAlaLysGlnSerIleMetPheMetProSerLeuHisSer 246  
Oy 760 ATAGTGAATTTCTGTACGAAACAAACACAAAGAAAGCTCCAAACAGCAAAATCA 819  
Dh 247 ValThrGluPheCysThrGIuLysThrHisAsnThrGIuAlaProAsnLeuGlnAsnLys 266  
Oy 820 AAATGCATTCGCCAAGACACATGGAGATCCGTGATTCGTGAGACCTTTAAAGAAACC 879  
Dh 267 MetCysAsnGlyLysSerThrTrpAspValIleMetAsnSerValAspPheGlnAsnThr 286  
Oy 880 ACTCCTATGACA-----ACACAGCCACCAATCCACCTTCTCATTCGACGATGGGA 933  
Dh 287 SerProMetThrGlnMetAsnProThrHisProThrPheSerLeuLeuLysSerLys 306  
Oy 934 CAAGAATTTGT 993  
Dh 307 GlnArgValAlaCysLeuValLeuAspLysSerGlySerMetSerIleGlnAspArgLeu 326  
Oy 994 AATGCATGAAATCAAGAGGCGAGCTTTCCGTGCGTGCAGACAGCTTGAGCTGGGCTCGG 1053  
Dh 327 PheGlnMetAsnGlnAlaIleGlnLeuTyrLeuIleGlnValIleGlnLysLysSerLeu 346  
Oy 1054 GTTGGGATGTGTACATTTGACAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1113  
Dh 347 ValGlnMetValThrPheAspSerValAlaGlnIleGlnAsnHisLeuThrArgIleThr 366  
Oy 1114 AGTGGCAGTACAGAGGACACACTGCCCAAAAGATTAACCTGCAGACGCTTCAGAGGAG 1173  
Dh 367 AspAspAsnValTyrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlyLysThr 386  
Oy 1174 TCCATCTGACAGGCGCTCGATCCGCGCATTT---ACTGTGATTAGAAAGAAATATCCACT 1230  
Dh 387 SerIleCysArGGIuLysLysAlaLysPheGlnAlaIleIleHisSerAspGlnSerThr 406  
Oy 1231 GATGAGATGAATTTGT 1290  
Dh 407 SerGIuSerGIuIleIleLeuLeuThrAspArgLysAspAsnGlnIleAsnSerCysPhe 426  
Oy 1291 AAGCAGTCAAAACAAAGT 1350  
Dh 427 GIuAspValLysArGSerGIuAlaIleThrHisThrIleAlaLeuGlyProSerAlaIle 446

Oy 1351 CAAGACTAGACGAGCTGTCCAAAATGACAGAGGTTTACAGACTATGCTCATCATCA 1410  
Dh 447 LysGlnLeuGluThrLysSerAsnMetThrGlyGlyTyrArgPhePheAlaAsnLysAsp 466  
Oy 1411 GTTCAGAACAAATGGCTCATGATGATCTTTTGGGGCCCTTTCATCAGAAATGAGACTGTC 1470  
Dh 467 Ile-----ThrGIuLeuThrAsnIlePheSerArgIleSerSerArgSerGlySerIle 484  
Oy 1471 TCTCAGCGCTCATTCAGCTTGAGAGTAAAGGATTTAACCTTCACAAACAGCAGTGATG 1530  
Dh 485 ThrGlnGlnAlaIleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgLysArgVal 504  
Oy 1531 AATGCAAGATGATGTGGAGACAGCAGCGGGAAGAGCACTGTGTTGCTTCCATCCAGG 1590  
Dh 505 AsnGIuThrValProValAspSerThrValGlnLysAsnAspThrPhePheValAlaThrTrp 524  
Oy 1591 ACAACGACAGCTCCCAATATCCCTCTGTGGATTCCTCAGTGCAGAC-----AAGCAAGT 1644  
Dh 525 ThrIleGlnLysProGlnIleValLeuGlnAspProLysGlyLysLysTyrLysThrSer 544  
Oy 1645 GCGTTGTAGTGGACAAA---AACACAAATATGCTTACCTCCAAATCCAGGACTGCT 1701  
Dh 545 AspPheLysGluAspLysLeuAsnIleArgSerAlaArgLeuGlnIleProGlyIleAla 564  
Oy 1702 AAGGTGGCAGCTTGGAAATPACAGTCTG-----CAAGCAGGCTCAAAACCTGACG 1752  
Dh 565 GIuThrGIuThrTrpThrTyrSerLeuLeuAsnAsnHisAlaSerSerGlnMetLeuThr 584  
Oy 1753 CTGACTGTACAGTCCCGTGGCGTCAATGCTACTACCTCCGCTCCAAATPACAGTACTTCAAA 1812  
Dh 585 ValThrValThrThrArgAlaArgSerProThrIleProProValIleAlaIleThrAlaHis 604  
Oy 1813 ACGAACAAGACACCAACAATTCCTCCAGCCCTCTGTGATTTATGCAAAATTTGCCAA 1872  
Dh 605 MetSerGlnHisThrAlaHisTyrProSerProMetIleValTyrAlaGlnValSerGln 624  
Oy 1873 GGAGCTCCCGCAATTCCTAGGCGCCAGTGCACACAGCTGATGATGATGATGATGATG 1932  
Dh 625 GlyPheLeuProValLeuGlyIleSerValIleAlaIleIleGlnThrGlnAspLysHis 644  
Oy 1933 ACAGTTACCTTGGAACTAGTGAATGATGAGACAGAGTGTGATGTACTAAGGATACAGCT 1992  
Dh 645 GlnValThrLeuGlnLeuThrAspAsnGlyAlaGlyArgAspThrValLysAsnAspLys 664  
Oy 1993 GTTACTCAAGGATTTTACAACTTATGACACAGATGTGATATACAGTGTAAATGTGGG 2052  
Dh 665 IleTyrSerArgTyrPheThrAspTyrTyrGlnAsnGlyArgTyrSerLeuLysValHis 684  
Oy 2053 GCTGTGGGAGGATTAACGACAGCCAGAGGAGATTAACCCACAGCAGTGGAGACACTG 2112  
Dh 685 AlaGlnAlaArgAsnAspThrAlaArgLeuAsnLeuArgGlnProGlnAsnLysValLeu 704  
Oy 2113 TACATACCTGGCTGTGATTTGAGATGATGATGAATGAATGAATCCACAAAGCTGAATT 2172  
Dh 705 TyrValProGlyTyrValGlnAsnGlyLysIleIleLeuAsnProProArgProGlnVal 724  
Oy 2173 AATAAGATGATTTCAACACACAGCAAGTGTGTTTCACAGACAACTCTCGGAGGCTCA 2232  
Dh 725 LysAspAspLeuAlaLysAlaLysIleGlnAspPheSerArgLeuThrSerGlyLysSer 744  
Oy 2233 TTTTGCGCTTGATGTC---CCAAATGCTCCCAATCACTGATCTTCCACCTTGGCCCA 2289  
Dh 745 PheThrValSerGIuAlaProProGlnLysAsnHisProSerValPheProToserLys 764  
Oy 2290 ATCACGACCTGACAGCGGAATTCACGGGGCACTCATTAATCTGACTTGGACACT 2349  
Dh 765 IleThrAspLeuGlnAlaLysPheLys---GlnAspTyrIleGlnLeuSerTrpAla 783  
Oy 2350 CCTGGGATGATTTATGACATGGAACACACTCAAGTATATCATTTGCAATTAAGTCAAGT 2409  
Dh 784 ProGlnAsnValLysAspLysGlyLysAlaAsnSerTyrIleIleArgIleSerLysSer 803





```

OY 1513 CAGAACAGCCAGTGGATGATGGACAGTATGTCGACAGCAGCCTGGGAAAGACACT 1572
    ::::::::::::::::::::
DB 498 ARGAlaGlyAlaIleArgIleAsnGlyThrValProIleAspSerThrValGlyAsnAspThr 517
OY 1573 TTGTTTCTATACCTGGACCAACGAGCCTCCCAATCTCTCTGGATCCCACTGGA 1632
    ::::::::::::::::::::
DB 518 PhePheValIleThrThrMetValIleThrValIleThrValIleThrValIleThrValIle 537
OY 1633 CAGAGG-----CAAGGCTGCTTGTGATGGACAA--AACACCCGAATGCGCTACCTC 1683
    ::::::::::::::::::::
DB 538 LysLysTyrThrThrThrSerAspPheGlnAspAspLysLeuAsnIleArgSerIleArgLeu 557
OY 1684 CAAATCCAGGAGCTATGCTAGGCTGGACCTGGCAATATACAGTCTGCACCAAGC--TCA 1740
    ::::::::::::::::::::
DB 558 GlnIleProGlyThrAlaIleGlyThrGlyThrThrThrThrThrThrThrThrThrThrThr 577
OY 1741 CAAACCTTGACCTGACCTGACCTGACCTGACCTGACCTGACCTGACCTGACCTGACCT 1800
    ::::::::::::::::::::
DB 578 GlnLeuIleThrMetThrValIleThrThrArgAlaIleArgSerProThrMetGlnProLeu 597
OY 1801 GTGACTTCCAAAGCAAGGACACAGCAATGCCAGGAGCCTGCTGCTGCTGCTGCTGCTGCT 1860
    ::::::::::::::::::::
DB 598 GlyTyrCysTyrMetSerIleThrAlaGlnTyrProSerArgMetIleValIleValIle 617
OY 1861 AATATTCGCAAGAGAGCCTCCCAATCTCAGGGCCAGTGCACAGCCTGATGATCA 1920
    ::::::::::::::::::::
DB 618 ArgValIleSerGlnGlyPheLeuProValIleGlnGlyAlaAsnValThrAlaIleGlnAla 637
OY 1921 GTGATGGAAAAACAGTACCTTGGAATGATGATGATGATGATGATGATGATGATGATGAT 1980
    ::::::::::::::::::::
DB 638 GlnHisGlyHisGlnValThrLeuGlnLeuThrAspAsnGlyAlaGlyAlaAspIleVal 657
OY 1981 AAGGATGCGGTGCTGCAAGTATGCTGATGATGATGATGATGATGATGATGATGATGATGAT 2040
    ::::::::::::::::::::
DB 658 LysAsnAspGlyIleTyrThrArgTyrPheThrAspTyrHisGlyAsnGlyArgTyrSer 677
OY 2041 GTAAAAGTGGGAGCTCTGGAGAGATTAAAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 2091
    ::::::::::::::::::::
DB 678 LeuLysValArg-----ValGlnAlaGlnArgAsnLysThrArgLeuSerLeu 693
OY 2092 CCCCAGCAGATGGAGACACTGATACATACCTGCTGATGATGATGATGATGATGATGATGATGAT 2151
    ::::::::::::::::::::
DB 694 ArgGlnLysAsnLysSerLeuTyrIleProGlyTyrValGlnLysAsnGlyIleValLeu 713
OY 2152 AATCCACCAAGCAGCTGAATTAATGAATGATGATGATGATGATGATGATGATGATGATGAT 2211
    ::::::::::::::::::::
DB 714 AsnProProArgProAspValGlnGlnGlnAlaIleGlnAlaThrValGlnLysPheAsn 733
OY 2212 AAGACATCCTCGGAGGCTCATTTGGCTTGTGATGCTGCAATGCTCCATACCTGAT 2271
    ::::::::::::::::::::
DB 734 ArgValThrSerGlyGlySerPheThrValSerGlyAlaPro-----ProAsp 749
OY 2272 -----CTCTTCCACCTGGCCAATCCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 2316
    ::::::::::::::::::::
DB 750 GlyAspHisAlaArgValPheProProSerLysValThrAspLeuGlnAlaGlnPheIle 769
OY 2317 GGGGCGAGCTGATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2376
    ::::::::::::::::::::
DB 770 ---GlyAspTyrIleHisLeuThrThrThrAlaProGlyLysValLeuAspAsnGlyArg 788
OY 2377 GCTCAACTATATCATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2436
    ::::::::::::::::::::
DB 789 AlaHisArgTyrIleIleArgMetSerGlnHisProLeuAspLeuIleAsnAspPheAsn 808
OY 2437 GAATCTCTTCAAGTGAATCTAGCTGCTCATCCCAAGGAGCAGCAGCAGCAGCAGCAGCAGCAG 2496
    ::::::::::::::::::::
DB 809 AsnAlaThrLeuValAsnAlaSerSerLeuIleProLysGlnAlaGlySerLysGlnAla 828
OY 2497 TTTTGTGTTAAACAGAAAACATCTACTTTGAAATGGCAGCAGATTTTTCATGCTGAT 2556
    ::::::::::::::::::::
DB 829 PheLysPheLysProGlyThrPheLysIleAlaAsnGlyIleGlnIleThrIleAlaIle 848
OY 2557 CAGGCTGTTGATAGGTGATCTGAATATCAGAAATATTCACATTCACAGAGATCTTGG 2616

```

```

DB 849 GlnAlaAspAsnGlnAlaSerLeuThrSerGlnValSerAsnIleAla----- 864
OY 2617 TTTATTCCTCCACAGACCTCCGACAGACACTAGTCCTGATGAAACCTCTGCTCT 2676
    ::::::::::::::::::::
DB 865 -----GlnAlaValLysLeuThrSerLeuGlnAspSerIleSerIleAlaGly 880
OY 2677 CCTAATATTCAT---ATCAACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 2721
    ::::::::::::::::::::
DB 881 AspAspIleSerAlaIleSerMetThrIleTyrGlyLeuThrValIle 896

RESULT 5
US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 30
; LENGTH: 1000
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-193-562D-30

Alignment Scores:
Pred. No.: 1,55e-189 Length: 1000
Score: 2258.50 Matches: 466
Percent Similarity: 67.18% Conservative: 140
Best Local Similarity: 51.66% Mismatches: 253
Query Match: 41.98% Indels: 43
DB: 4 Gaps: 13

US-09-049-696-20 (1-2983) x US-09-193-562D-30 (1-1000)
OY 34 TTTAAGAGTCTGTGTTTCATCTTTCATCTTTCATCTTTCATCTTTCATCTTTCATCTTTCAT 93
    ::::::::::::::::::::
DB 3 PheSerLeuLysValIleLeuPheLeuSerLeuLeuLeuSerProValLeuLysSer 22
OY 94 CTCATTCAGCTACACACAAATGGCTAAGGCAATGCTGCTGCAATGCAACCCCAATGTG 153
    ::::::::::::::::::::
DB 23 LeuValThrLeuAsnAsnAsnGlyTyrAspGlyIleValIleAlaIleAsnProSerVal 42
OY 154 CCAGAAATGAAACACTCTATTACAAATAAAGAGCATGCTGATCCAGCAGCATCTGTAT 213
    ::::::::::::::::::::
DB 43 ProGlnAspGlnLysLeuIleGlnAsnIleLysGlnMetValThrGlnAlaSerThrHis 62
OY 214 CTGTTGAGCTACAGGAAGGATTTTATTCAAAATGTTGCCATTTGATTCCTGAA 273
    ::::::::::::::::::::
DB 63 LeuPheHisAlaThrLysGlnArgAlaTyrPheAlaGlnValSerIleLeuIleProMet 82
OY 274 ACATGGAGACAAAGGCTGACTATGTGACAGCAAAACCTTGAGACTTACAAAATGCTGAT 333
    ::::::::::::::::::::
DB 83 ThrTyrLysSerLysSerGlnTyrLeuIleProLysGlnGlyThrTyrAspIleAlaAsp 102
OY 334 GTTTCGTGCTGAGCTGCTCTCTCCAGTATGATGAAACCTTACACTGACAGATGGCC 393
    ::::::::::::::::::::
DB 103 ValIleValAlaAspLeuTyrLeuLysTyrGlyAspAspProTyrThrLeuIleTyrGly 122
OY 394 AACTGTGAGAGAGAGGTTGAAGATCCACTGCTGATTCATTCAGAGAAAAG 453
    ::::::::::::::::::::
DB 123 GlnCysGlyAspLysGlyGlnTyrIleHisPheThrProAsnPheLeuLeuThrAsn 142
OY 454 TTAGTGAATATGACACCAAGGATGAGGCAATTTGTCATGAGTGGCTCATCTACAGTG 513
    ::::::::::::::::::::
DB 143 LeuAlaThrTyrGlyProArgGlyLysValPheValHisGlyTyrPheAlaHisLeuArgTyr 162

```





```

Db      874 AlaasValThrSerIuValSerAsnIleAlaGlnAlaThrAsnPhelIleProGln 893
QY      2632 ACTCG 2637
Db      894 GluPro 895

RESULT 6
US-09-193-562D-11
; Sequence 11, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Paul, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 11
; LENGTH: 795
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

Alignment Scores:
Pred. No.: 6,94e-178 Length: 795
Score: 2125.00 Matches: 425
Percent Similarity: 69.62% Conservative: 125
Best Local Similarity: 53.80% Mismatches: 224
Query Match: 39.50% Indels: 16
Gaps: 11

US-09-049-696-20 (1-2983) x US-09-193-562D-11 (1-795)
QY      46 GGTTCATCTTGTATCTTACCTCTAGAGAGGCGCCCTAGTAATTCACATTCACGTC 105
Db      8 IleuPheLeuThrLeuHisLeuLeuProGly--MetIysSerSerMetValAsnLeu 26
QY      106 AACCAACATGGCTATGAGCAAGCTGTCGTTGCAATGACCCCAATGTGCCAGAGATGAA 165
Db      27 IleAsnAsnGlyTyrAspGlyIleValIleAlaIleAsnProSerValProGluAspGlu 46
QY      166 ACATCTATTCACAATAAAGAGACATGTCACCCAGCATCTCTGTATCTGTTGAAGCT 225
Db      47 LysLeuIleGluAsnIleLysGluMetValThrGluAlaSerThrTyrLeuPheHisAla 66
QY      226 ACAGGAAGCGATTTTATTTCAAAAATGTTGCCATTTTGTATTCCTGAACATGGAAGACA 285
Db      67 ThrLysArgValTyrValThrAsnValSerIleLeuIleProMetThrTrpLysSer 86
QY      286 AAGGCTGACTATGAGACCAAACTGACACTACCAAAAATGCTGATCTGTTGCT 345
Db      87 LysSerGluTyrPheLeuProLysGlnGluSerTyrAspGlnAlaAspValIleValAla 106
QY      346 GAGTCTACTCTCCAGTAATGATGAACCTCACTGACAGATGGCAACTGTGGAGAG 405
Db      107 AsnProTyrLeuLysTyrGlyAspAspProTyrThrLeuGlnTyrGlyArgGlyGlu 126
QY      406 AAGGTGAAGAGATCCACTCTCCTGATTCATTCGCGAGAAAAAGTTAGCTGAATAT 465
Db      127 LysGlyLysTyrIleHisSerThrProAsnPheLeuThrAsnAsnPhenHisIleTyr 146
QY      466 GACACCAAGATGAGGATTTGTCATGATGGGCTCATCTGAGATGGGAGATTTGAG 525
Db      147 GlySerArgGlyArgValPheValHisGluTrpAlaHisLeuArgTrpGlyIlePheAsp 166
QY      526 GAGTACAAATGAATGAGAGAAATCTACTATTC--AATGAAGAATACAGCAGTAAGA 582
Db      167 GluTyrAsnValAspGlnProPheTyrIleSerArgLysAsnThrIleGluAlaThrArg 186

```

```

QY      583 TGTTCAGCAGTATTACGTGTAACAATGTA--AAGACTGTGAGGAGCAGCTGT 639
Db      187 CysSerThrHisIleThrIleIleAsnValPheLysLysCysProGlyLysCys 206
QY      640 TACACCAAAAGATGCACATTCATAATAAGACAGCACTATGAAAAAGATGATGATT 699
Db      207 IleThrSerLeuCysArgArgAspSerGlnThrGlyLeuAlaLysCysThrPhe 226
QY      700 GTTTCCAATCCCGCCAGACGAGAGAAAGCTTGTATATGTTTGCACACATGTTATCT 759
Db      227 LeuProLysLysSerGlnThrAlaLysGluSerIleMetPheMetProSerLeuHisSer 246
QY      760 ATAGTGAATTCCTGTAACAACAACCAACCAAAAGAGCTCCAAACAGCAAAATAGA 819
Db      247 ValThrGluPheCysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLys 266
QY      820 AATGCAATCTCCGAAAGACATGAGAGATGATCCGATTCGAGCACTTAAAGAAACC 879
Db      267 MetCysAsnGlyLysSerThrTrpAspValIleMetAsnSerValAspPheGlnAsnThr 286
QY      880 ACTCTATGACA-----ACACAGCCCAAAATCCCACTTCTCATGCTGTCGATGTGA 933
Db      287 SerProMetThrGluMetAsnProProThrHisProThrPheSerLeuLeuLysSerLys 306
QY      934 CAAAGATGTGTGTTTACTCTTGACAAATCTGAGAGATGGCAGCTGTAACCGCTTC 993
Db      307 GluArgValValCysLeuValLeuAspLysSerGlySerMetSerValGluAspArgLeu 326
QY      994 AATGCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1053
Db      327 PheGlnMetAsnGlnAlaIleGluLeuTyrLeuIleGlnValIleGluLysLysSerLeu 346
QY      1054 GTTGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1113
Db      347 ValGlyMetValThrPheAspSerValIleGluIleGlnAsnHisLeuThrArgIleThr 366
QY      1114 AGTGGAGTGAAGAGGACACACTCGCCCAAAATTAACCTGCGACAGCTTGACGAGAGAG 1173
Db      367 AspAspAsnValTyrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlyLysThr 386
QY      1174 TCCATCTGACGAGGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1230
Db      387 SerIleCysArgGlyLeuLysAlaGlyPheGlnAlaIleIleHisSerAspInsThrTrp 406
QY      1231 GATGATCTGAATGTCGCTGCTGACGAGTGGGAGAGACACATTAATGAGGTCGTTT 1290
Db      407 SerGlySerGluIleIleLeuLeuThrAspGlyGluAspAsnGluIleAsnSerCysPhe 426
QY      1291 AACGAGGTCAACAAAGTGTGTCCTCATCCACACAGCTGTTGGGCGCTTCGACGCT 1350
Db      427 GluAspValLysArgSerGlyAlaIleIleHisThrIleAlaLeuGlyProSerAlaAla 446
QY      1351 CAAGAAGTGAAGAGCTGTCACAAATGACAGAGGTTTCAACATATCTTCACATCA 1410
Db      447 LysGluLeuGluThrLysSerAsnMetThrGlyTyrArgPhePheHisAsnLysAsp 466
QY      1411 GTTCAGAACAAATGCGCTCATGATGCTTTGGGCGCTTTCATCAAGAAATGAGCTGTC 1470
Db      467 Ile-----ThrGlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySerIle 484
QY      1471 TCTCAGCGCTGCATCAGCTGAGATGAGATGAAGGATTAACCTCCAAACAGCCAGTGATG 1530
Db      485 ThrGlnGlnAlaIleGlnLeuGlnIleLysAlaLeuLysIleThrGlyArgLysArgVal 504
QY      1531 AATGCAACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1590
Db      505 AsnGlyThrValProValAspSerThrValGlyAsnAspThrPhePheValValThrTrp 524
QY      1591 ACAACGACGCTCCCAAAATCTCTCTGAGATCCCACTGACAGC-----AAGCAAGGT 1644
Db      525 ThrIleGlnLysProGluIleValLeuGlnAspProLysGlyLysLysTyrLysThrSer 544

```

[illegible]

Alignment Scores:			
Pred. No.:	7,06e-178	Length:	821
Score:	2125.00	Matches:	425
Percent Similarity:	69.62%	Conservative:	125
Best Local Similarity:	53.80%	Mismatches:	224
Query Match:	39.50%	Indels:	16
DB:	4	Gaps:	11
US-09-049-696-20 (1-2983) x US-09-193-562D-12 (1-821)			
QY	46 GTGTTCACTCTTGATTTCTTACACCTCTTACAGGGCCCGAGTAATTCATCATTCACCTG	105	
DB	8 ILEuLeuPheLeuThrLeuHisLeuLeuProGly--MetLysSerSerMetValAsnLeu	26	
QY	106 AACAAACATTCGGTATGAAGAGCATTCGTCTGTCATTCGACCCCAATGTGCCAAGAATGAA	165	
DB	27 ILEasnAsnGlyLysPheGlyILEvalILEalILEalILEasnProSerValProGluAspGlu	46	
QY	166 ACACATTCACAAACATTAAGAGCATTCGGTGAACCCAGGCATCTGTATTCGTTGAAGCT	225	
DB	47 LysLeuILEgluAsnILELysGluMetValThrGluAlaSerThrTYLeuPheHisAla	66	
QY	226 ACAGGAAGCGATTTTATTTCAAAAATTCGCCATTTTGATTCCTGGAACATGGAGACA	285	
DB	67 ThrLysArgAlaGlyValTYPheArgAsnValSerILEuLeuILEProMetThrTrpLysSer	86	
QY	286 AAGCGTACATATGTGACAGCAAAACCTTGACACCTACAAAAAATGCTATGTTCTGGTCT	345	
DB	87 LysSerGlyTYRheILEProLysGluInSerTYRspGlnAlaPheValILEvalAla	106	
QY	346 GAGTCTACTCCGCCAGTAATGATGACCTACACCTGACAGCATGGGCAACTGGAGAC	405	
DB	107 AsnProTYRLeuLysTYGlyLAspAspProTYRThrLeuGlnTYGlyArgCysGlyGlu	126	
QY	406 AAGGTGAAGAGATCCACCTCACTCTCGATTTTCATTCGTGACGAAAAAAGTTAGCTGAATAT	465	
DB	127 LysGlyLysTYRILEHisPheThrProAsnPheLeuThrAsnAsnPheHisILEtyr	146	
QY	466 GGACCAACAAGGTAGGGCATTTGTCTGCATGAGTGGGCTCATCTACATGGGAGATTTTGAC	525	
DB	147 GlySerAsnGlyIAspGlyValPheValHisGlyTrpAlaHisLeuArgTrpGlyILEPheAsp	166	
QY	526 GAGTCACATTAATGATGAGAAATTCCTACTTATCC--AATGAAACATPACAGCAGTACAGA	582	
DB	167 GluTYRAsnValAspGlnProPheTYRILEserArgLysAsnThrILEGluAlaThrArg	186	
QY	583 TGTTCAGCAGGTATTACTGTGTACAATGTAGTA--AAGAAGTGTCCAGGAGCAGCAGCTGT	639	
DB	187 CysSerThrHisILEThrGlyILEasnValAlaPheLysLysCysProGlyGlySerCys	206	
QY	640 TACACCAAAACATGCACATTCATATTAAGTAAACAGAGACTCTATGAAAAAGATGTGACTTT	699	
DB	207 ILEThrSerLeuCysArgArgAspSerGlnThrIleuTYRLeuTYRAlaLysCysThrPhe	226	
QY	700 GTTTCACATCCCGGCAACAGCAGGAGAGGCTCTATATGTTTGACAACATGGTGAATCT	759	
DB	227 LeuProLysLysSerGlnThrAlaLysGluSerILEMetPheMetProSerLeuHisSer	246	
QY	760 ATAGTTGAATTCGTATACAGAACAAACCCACAAAGAGAGCTCCAAACAGCAAAATACAA	819	
DB	247 ValThrGluPheCysThrGluLysThrHisAsnThrGluAlaProAsnLeuGlnAsnLys	266	
QY	820 AAATGCAATTCGCCAGACACATGGGAATGTATCCGTATTCGTAGCACTTTAAGAAAAC	879	
DB	267 MetCysAsnGlyLysSerThrTrpAspValILEMetAsnSerValAspPheGlnAsnThr	286	
QY	880 ACTGCTATAGACA-----ACACAGCCACCAAAATCCCAACCTTCATGTCGCGAGATTGCA	933	
DB	287 SerProMetThrGluMetAsnProThrHisIleProThrPheSerLeuLeuLysSerLys	306	
QY	934 CAAGAATTTGTGTATTAGTCTTGACAAATCTGGAAGCATGGGCACTGGTACCCCTTC	993	

[illegible]

```

Db 307 GlnatGValValCysLeuValLeuAspLysSerGlySerMetSerAlaGluAspArgLeu 326
OY 994 AATGCACTGAATACAGAGGCGACGCTTTCCGTGACAGACGTGAGCTGGGCGCTGG 1053
Db 327 PheGlnMetAsnGlnAlaAlaGluLeuValLeuIleGlnValIleGluLysGlySerLeu 346
OY 1054 GTTGGGATGTGACATTTTGACAGTGTGCTCCCATGTACAAAGTGAATGATACAGTAAAC 1113
Db 347 ValGlnMetValThrPheAspSerValAlaGluIleGlnAsnHisLeuThrArgLeuThr 366
OY 1114 AGTGGCACTGACAGGAGACACATGCGCCAAAGATTACSTGACAGACSTTCCAGAGGAGAC 1173
Db 367 AspAspAsnValValThrGlnLysIleThrAlaLysLeuProGlnValAlaAsnGlyLeuThr 386
OY 1124 TCCATCTCAGCGGCTCGATCGCATTTT---ACTGTGATTAGGAAGAATAATCCACT 1230
Db 387 SerIleCysArgGlyLeuLysAlaGlyPheGlnAlaIleIleHisSerAspGlnSerThr 406
OY 1231 GATGGATCTGAATTTGTGCTGTGACGAGTGGGAGAGACACATTAATGATGGTGTCTT 1290
Db 407 SerGlySerGluIleIleLeuLeuThrAspGlyGluAspAsnGluIleAsnSerCysPhe 426
OY 1291 AACGAGCTCAACAAAGTGGTCCATCATCCACAGATGCTTTGGGCGCTCTGACGT 1350
Db 427 GluAspValLysArgSerGlyAlaIleIleHisThrIleAlaLeuGlyProSerAlaAla 446
OY 1351 CAGAACTAGAGGAGGACCTGTCCAAATGACAGAGGTTTACAGACATTCATTCACATCA 1410
Db 447 LysGlnLeuGluThrLysSerAsnMetThrGlyGlyTyrArgPheAsnHisLysAsp 466
OY 1411 GTTCAACAATAGGCTCATTTGCTTTGGGCGCTTTCACGAAATGAGACCTGTC 1470
Db 467 Ile-----ThrGlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySerIle 484
OY 1471 TCTAGCCCTCATCTACCTGAGAGTAAAGGATTAACTCCATCCAGACAGCCATGGATG 1530
Db 485 ThrGlnGlnAlaIleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgSerArgVal 504
OY 1531 AATGGCAGATGATGTGGAGACAGCGCTGGGAAGGACACTTTTCTTCTATCCACTGG 1590
Db 505 AsnGlyThrValProValAspSerThrValGlyAsnAspThrPhePheValValThrTrp 524
OY 1591 ACAACGACAGCTCCCAATCTCTGTGATCCAGTCCAGTGCAGAC-----AAGCAAGT 1644
Db 525 ThrIleGlnLysProGlnIleValLeuGlnAspProLysGlyLysLysTyrIleThrSer 544
OY 1645 GCGTTTGTAGTGGACA---AACACCAAAATGGCTTACTCTCAATCCAGCAGATTCGT 1701
Db 545 AspPheLysGluAspLysLeuAsnIleArgSerAlaArgLeuGlnIleProGlyIleAla 564
OY 1702 AAGTTGGCACTGTGAAATACAGTCTG-----CAAGCAAGCTCCAAACCTTGACC 1752
Db 565 GluThrGlyThrTrpThrLysSerLeuAsnAsnHisAlaSerSerGlnMetLeuThr 584
OY 1753 CTGATCTTCACGTCCCTGCGTCCATGCTACCTGCTACCTCCATTAACAGTGCATTCCAA 1812
Db 585 ValThrValThrThrArgAlaArgSerProThrIleProProValIleAlaThrAlaHis 604
OY 1813 ACGAACAAGACACAGCAAAATTCGCCAGCCCTGTGATGTTATGCAAAATATTCGCCAA 1872
Db 605 MetSerGlnHisThrAlaHisTyrProSerProMetIleValTyrAlaGlnIleSerGln 624
OY 1873 GGAGCGTCCCAATTCAGGCGCCAGTGCACAGCCCGATGGATGATCACTGAATGGAAA 1932
Db 635 GlyPheLeuProValLeuGlyLysSerValIleAlaIleGluThrGlnLysPheHis 644
OY 1933 ACAGTTACCTTGGACACTACTGATATGAGAGCAGAGTGTGCTGATCACTAAGATACAGGT 1992
Db 645 GlnValThrLeuGlnLeuThrAspAsnGlyAlaGlyArgAspThrValLysAsnAspGly 664
OY 1993 GTCACTCAAGGATTTATCAAACTTATGACACGAATGGTATACAGTGTAAAGTGGCG 2052
Db 665 IleTyrSerArgTyrPheThrAspTyrTyrGlyAsnGlyArgTyrSerLeuLysValHis 684

```

```

OY 2053 GCTTGGGAGAGATTAAAGCAGCCAGAGAGATGATACCCAGAGTGGACACTG 2112
Db 685 AlaGlnAlaValAsnAsnThrAlaArgLeuAsnLeuAlaGlnProGlnAsnLysValLeu 704
OY 2113 TACATACCTGGCTGTGATTGAGAATGATGATAATCAATGGAATGCACAGACCTGAATT 2172
Db 705 TyrValProGlyTyrValGlnLysnGlyLysIleIleLeuAsnProProArgProGluVal 724
OY 2173 AATAAGATGATGTTCAACACAGCAAGTGTGTTTCAGCAACAATCTCCGGGAGGCTCA 2232
Db 725 LysAspAspLeuAlaLysAlaLysIleGluAspPheSerArgLeuThrSerGlyLysSer 744
OY 2233 TTTGTGGCTCTGATGTC---CCAAATGCTCCCATACCTGATCTCTCCAGCTGGCCAA 2289
Db 745 PheThrValSerGlyAlaProProProGluAsnHisProSerValPheProProSerLys 764
OY 2290 ATCACCAGCTTGAAAGCGGAAATTCACGGGGCAGCTCATTAATCTGACTTGGACACT 2349
Db 765 IleThrAspLeuGluAlaLysPheLys--GluAspTyrIleGlnLeuSerThrPheAla 783
OY 2350 CCTGGGATGATTATGACCATGGAACACT 2379
Db 784 ProGlyAsnValLeuAspLysGlyLysAla 793

RESULT 8
US-09-193-562D-32
; Sequence 32, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617-0052
; CURRENT APPLICATION NUMBER: US/09/193, 562D
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIORITY FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 32
; LENGTH: 943
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-193-562D-32

Alignment Scores:
Pred. No.: 7.73e-166 Length: 943
Score: 1988.00 Matches: 416
Percent Similarity: 63.04% Conservative: 164
Best Local Similarity: 45.22% Mismatches: 284
Query Match: 36.95% Indels: 56
Db: 4 Gaps: 21

US-09-049-696-20 (1-2983) x US-09-193-562D-32 (1-943)
OY 4 ATCAAGAGGAGATGATACAGCAATGGGCGCATTTAGAGTTCGTGTCATCTTATCTT 63
Db 1 MetThrGlnArgSerIleAla---GlyProIleCysAsnLeuLysPheValThrLeuLeu 19
OY 64 CACCTTCTAGAAGGCGCCCTGAGTAATTCACCT-----ATTTCAGCTG 105
Db 20 -----ValAlaLeuSerSerGluLeuProPheLeuGlyAlaGlyValGlnLeu 35
OY 106 AACACAATGCTGTATGAAAGGCATTTGCTGTCATATGACCCCAATGTGCGCAAGATGAA 165
Db 36 GlnAspAsnGlyTyrAsnGlyLeuLeuIleAlaIleAsnProGlnValProGluAsnGln 55
OY 166 ACATCATTCACAACAAATTAAGACATGTCGACCCGAGCATCTGTCATCTGTTGAAGCT 225
Db 56 AsnLeuIleSerAsnIleLysGluMetIleThrGluAlaSerPheTyrLeuPheAsnAla 75
OY 226 ACAGGAAGCGATTTTATTCGAAAATGTGCGATTTTGAATTCCTGAACAATGGAAGACA 285

```

Db ThrLysArgArgValPhePheArgAsnIleLysIleLeuIleProAlaThrTrpLysAla 95  
 QY 286 AAGGCGATGATGTGAGACCAAACTTGAGCTTACAAAATGCTATGCTGGTGGCT 345  
 Db Asn---AsnAsnSerLysIleLeuGlnGlnSerTrpGlnLysAlaAsnValIleValThr 114  
 QY 346 GAGTCTACTCTCCAGATGATGATGAACCTTACACTGACAGATGGGCACTGTGAGAG 405  
 Db AspTrpTrpGlyAlaIleHisGlnLysAspProTyrThrLeuGlnTyrArgLysGlyLys 134  
 QY 115 AspTrpTrpGlyAlaIleHisGlnLysAspProTyrThrLeuGlnTyrArgLysGlyLys 134  
 Db 115 AspTrpTrpGlyAlaIleHisGlnLysAspProTyrThrLeuGlnTyrArgLysGlyLys 134  
 QY 406 AAGGCGTAAAGATCCACTCTCTGATTCATTCGAGGAAAAAGTTA---GCTGAA 462  
 Db 135 GlnGlyLysTrpIleHisPheThrProAsnPheLeuLeuAsnAspAsnLeuThrAlaGly 154  
 QY 463 TATGGACCAAGGATGGGATTTGTCATGAGTGGGCTCATGTAGATGGGAGATTTT 522  
 Db 155 TyrGlySerArgGlyArgValPheValHisGlnTrpAlaHisLeuArgTrpGlyValPhe 174  
 QY 523 GACGATACAAATATGATGATAAATTTCTATTATCC---AATGGAAATATCAAGCAGTA 579  
 QY 175 AspGlnTyrAsnAsnAspLysProPheTyrIleAsnGlnLysValThr 194  
 Db 580 AGATGTTACAGCAGGATTAATCTGTGTACAAATGTAATAAGAGTGTACAGGAGCCACTGT 639  
 QY 195 ArgCysSerSerAspIleThrGlyIlePheVal-----CysGlnLysGlyProCys 211  
 QY 640 TACACCAAAAGATGCATTCATTAAGTAAGTAACAGACTGTATGAAAAAGATGTGATT 699  
 Db 212 GTTGCGlnLysnGlnCysIleIleSerLys-----LeuPheLysGlnGlyCysThrPhe 228  
 QY 700 GTTCTCCAAATCCCGCAGACGAGAGGCTTCTATATATTTTGCACAAATGTTGATT 759  
 Db 229 IleTyrAsnSerThrGlnAsnAlaThrAlaSerIleMetPheMetGlnSerLeuSerSer 248  
 QY 760 ATATGTTGATTTCTGTACAGACAAAACACACAAAGAGCTCCAAACAGCAAAATCAA 819  
 Db 249 ValValGlnPheCysAsnAlaSerThrHisAsnGlnGlnAlaProAsnLeuGlnAsnGln 268  
 QY 820 AATGCAATCTCGGAGCAGCATGGAAGATGATCCGATTCTGAGCACTTAAGAAAC 879  
 Db 269 MetCysSerLeuArgSerAlaTrpAspValIleThrAspSerAlaAspPheHisSer 288  
 QY 880 ACTCCATG-----ACAACACAGCCACCAAAATCCGACTTCTCATCTGCTGAGATTG 933  
 Db 289 PheProMetAsnGlnThrGlnLeuProProProProThrPheSerLeuValGlnAlaGly 308  
 QY 934 CAAGAATTTGTGTTTGTCTTGTGACAAATCTGGAAGCTGCGGACTGTAACCGCTC 993  
 Db 309 AspLysValValLysLeuValIleuAspValSerSerLysMetAlaGlnAlaAspArgLeu 328  
 QY 994 AATCGACTGAATCAAGCAGAGCCAGCTTTCTGTGACAGCATGTGAGCTGGGGTCTCTG 1053  
 Db 329 LeuGlnLeuGlnGlnAlaAlaGlnPheTyrLeuMetGlnIleValGlnIleHisThrPhe 348  
 QY 1054 GTTGGATGGTGCATTTGACACTGCTGCCATCAAAAGTACAACTATCAATAGATTAAC 1113  
 Db 349 ValGlyIleLeuSerPheAspSerLysGlyGlnIleArgLacGlnLeuHisGlnIleAsn 368  
 QY 1114 AGTGGCAGTACAGGACACACTCCGCCAAAGATTTACCTGACAGCACTTACAGAGGAGC 1173  
 Db 369 SerAsnAspAspArgLysLeuLeuValSerTyrLeuProThrThrValSerAlaLysThr 388  
 QY 1174 -----TTCATTCGACGGGGCTTCGATTCGCAATTTACTGTATTTAGGAAG---AATAT 1224  
 Db 389 AspIleSerIleCysSerGlyLeuLysGlyPheGlnValValGlnLysLeuAsnGly 408  
 QY 1225 CCAACTGATGATCTGAATTTGCTGCTGACCGCATGGGAGAGCAACACTATTAAGTGG 1284  
 Db 409 LysAlaIleTyrGlySerValMetIleLeuValThrSerGlyAspAspLysLeuLeuGlyAsn 428  
 QY 1285 TGCCTTAAAGAGGTCAAAACAGTGTGCTCATATCCACAGCTCGCTGGGCGCTCT 1344  
 Db 429 CysLeuProThrValLeuSerSerGlySerThrIleHisSerIleAlaLeuGlySerSer 448

QY 1345 GCAGCTCAAGAACTAGAGAGCTGTCCAAATATGACAGAGGTTTACAGCATATGCTTCA 1404  
 Db 449 AlaAlaProAsnLeuGlnLysLeuSerArgLeuThrGlyLysLeuLysPhePheValPro 468  
 QY 1405 GATCAAGTTACAGACATAGCCCTCATTTGCTTTTGGGCGCTTTATCATCAGAAATGTA 1464  
 Db 469 AspIleSerAsnSerAsnMetIleAspAlaPheSerArgIleSerSerGlyThrGly 488  
 QY 1465 GCTGTCTCAGCGCTCCATCCAGCTTGAGAGTAAGGATTAACCTCCAGAAAGCCAG 1524  
 Db 489 AspIlePheGlnGlnHisIleGlnLeuGlnSerThrGlyGlnAsnValLysProHis 508  
 QY 1525 TGGATGAATGGCAGCATGTATGATGACACAGCCGTGGGAAAGACATTTGTTTATTC 1584  
 Db 509 GlnLeuLysAsnThrValThrValAspAsnThrValGlyAsnAspIleMetPheLeuVal 528  
 QY 1585 ACCTGG---ACAACGACGCTCCCAATTCCTTCTGTGGGATCCAGTGGACAGAAAG--- 1638  
 Db 529 ThrTrpGlnAlaSerGlyProProGlnIleIleLeuPheAspProAspLysTrp 548  
 QY 1639 ---CAAGTGGCTTGTACTGACAAACAAACCAAAATGCGCTACCTCCAAATCCAGGC 1695  
 Db 549 TyrThrAsnAsnPheThrThrAsnLeuThrPheArgThrAlaSerLeuTrpIleProGly 568  
 QY 569 ThrAlaLysProGlyHisThrTrpThrThrLeuAsnAsnThrHisSerLeuGlnAla 588  
 QY 1747 TTGACCTGACTGTCAAGTCCGCTGCGCTCAATGTAACCTGCTTCAATTTACAGTACT 1806  
 Db 589 LeuLysValThrValThrSerArgAlaSerAspSerAlaValAlaProProAlaThrValGln 608  
 QY 1807 TCCAAACGACAAAGCAGACACCAATATCCCGACCTGTGTGATTTATGCAATATT 1866  
 Db 609 AlaPheValGlnArgAspSerLeuHisPheProHisProValMetIleTyrAlaAsnVal 628  
 QY 1867 CGCCAAAGAGCCCTCCCAATTTCTCAGGCGCAGTGTCAACGCCCTGATTAATCAGTAAT 1926  
 Db 629 LysGlnGlyPheTyrProIleIleAsnAlaThrValThrAlaThrValGlnProGlyThr 648  
 QY 1927 GGAANAACAGTTACCTTGTGACACTACTGTGATATGACAGCGTGTCTATGTAAGAT 1986  
 Db 649 GlyAspProValThrLeuArgLeuLeuAspAspGlyAlaGlyAlaAspValIleLysAsn 668  
 QY 1987 GACGATGTACTCAGGATTTTACAACTTATGACACAGCAATGATGTATGATACAGTAA 2046  
 Db 669 AspGlyIleLeuTyrSerArgTyrPhePheSerPheAlaAlaAsnGlyArgTyrSerLys 688  
 QY 2047 GTCCGGGCTCTGGAGAGTTTAACGACGACGACGAGAGATGATCCGACAG--- 2100  
 Db 689 ValHis-----ValAsnHisSerProSerIleSerThrProAlaHisSerIle 704  
 QY 2101 -----AGTGGACACTGTACATACCTGCTGATGATGACATGATGATTAATACATGAT 2154  
 Db 705 ProGlySerHisIleMetTyrValProGlyTyrThrAlaAsnGlyAsnIleGlnMetAsn 724  
 QY 2155 CCACCAAGACCTGAATTAATAGATGATGATGATGATGATGATGATGATGATGATGAT 2214  
 Db 725 AlaProArgLysSerValGlyArgAsnGlnGlnArgLysTrp---GlyPheSerArg 743  
 QY 2215 ACATCTCGGAGAGCTCATTTGCTGCTGATGATGATGATGATGATGATGATGATGAT 2274  
 Db 744 ValSerSerGlyLysPheSerValLeuGlyValProAlaGlyProHisProAspVal 763  
 QY 2275 TTCCCACTGCGCAATACACCGCATGGAAGCGGAAATTCACGGGGGCACTCATTAAT 2334  
 Db 764 PheProProCysLysIleLeuAspLeuGlnAla---ValLysValGlnGlnLeuLeuThr 782  
 QY 2335 CTGACTTGAACAGCTCTGGGATGATTAAGCATGGAATGGAACAGCTCAAGTATATCAT 2394  
 Db 783 LeuSerThrThrAlaProGlyLysAspPheAspGlnGlnAlaThrSerTyrGlnIle 802



```

: APPLICATION NUMBER: 08/469,667
: FILING DATE: 06-JUN-1995
: ATTORNEY/AGENT INFORMATION:
: NAME: Ferraro, Gregory D.
: REGISTRATION NUMBER: 36,134
: REFERENCE/DOCKET NUMBER: 325800-435
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 201-994-1700
: TELEFAX: 201-994-1744
: INFORMATION FOR SEQ ID NO: 9:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 228 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-09-224-110-9

Alignment Scores:
Pred. No.: 2,38e-97 Length: 228
Score: 1203.00 Matches: 228
Percent Similarity: 100.00% Conservative: 0
Local Similarity: 100.00% Mismatches: 0
Query Match: 22.36% Indels: 0
Gaps: 0
DB: 4

US-09-049-696-20 (1-2983) x US-09-224-110-9 (1-228)

QY 1993 GGTCTACTCAAGTATTTTCACAACTTATGACAGCAAGTAGATACAGTGAAGTGGCG 2052
: |||||
Db 1 ValTyrSerArgTyrPheThrThrTyrAspPThrAsnGlyArgTyrSerValIysValArg 20
QY 2053 GCTCTGGAGAGACTTAAACGACGACGAGAGAGTATACCCAGCAGAGTGGAGCAGT 2112
: |||||
Db 21 AlaLeuGlyValAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAla 40
QY 2113 TACATACCTGGCGGATGTTGAGATGATGAATGATGATGATGATGATGATGATGAT 2172
: |||||
Db 41 TyrIleProGlyTyrPheGlyLysAsnAspGluIleGlnTrpAsnProProArgProGluIle 60
QY 2173 AATAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2232
: |||||
Db 61 AsnLysAspAspValGlnHisLysGlnValCysPheSerArgThrSerSerGlyLysIle 80
QY 2233 TTGTGGCTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2292
: |||||
Db 81 PheValAlaSerAspValAlaProAsnAlaProIleProAspLeuPheProProGlyGlnIle 100
QY 2293 ACCGACCTGAAGCGGAAATTCACGGGGGAGCTCATTAATCTGAGTGGAGAGCTCT 2352
: |||||
Db 101 ThrAspLeuLysAlaIleLysGlySerLeuIleAsnLeuThrTrpThrAlaPro 120
QY 2353 GGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2412
: |||||
Db 121 GlyAspAspTyrAspHisGlyThrAlaHisLysTyrIleLeuArgLysSerThrSerIle 140
QY 2413 CTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2472
: |||||
Db 141 LeuAspLeuArgAspLysPheAsnGlnSerLeuGlnValAlaSerThrAlaLeuIlePro 160
QY 2473 AAGGAGCCCACTGTAGAGAGTCTTTTGTGTTAAACGAGAAACATCTTTTGAAGT 2532
: |||||
Db 161 LysGlnAlaAsnSerIleGlnValAlaPheLeuPheLysProGlnAsnIleThrPheGlnAsn 180
QY 2533 GGCACGATCTTTTCACTGATGATGATGATGATGATGATGATGATGATGATGATGAT 2592
: |||||
Db 181 GlyThrAspLeuPheThrLeuAlaIleGlnAlaValAspLysValAspLeuLysSerGluIle 200
QY 2593 TCCCAATGTCAGAGATATCTTTGTTATTCCTCCACAGACTCCGACAGACAGACTAGT 2652
: |||||
Db 201 SerAsnIleAlaLysValSerLeuPheIleProIleProGlnThrProProGlnThrProSer 220
QY 2653 CCGATGAAGAGCTGCTCTCTGT 2676
: |||||

```

```

Db 221 ProAspGluThrSerAlaProCys 228

RESULT 11
PCT-US95-07289-9
: Sequence 9, Application PC/TUS9507289
: GENERAL INFORMATION:
: APPLICANT: Yu, Guo-Liang
: APPLICANT: Rosen, Craig
: TITLE OF INVENTION: Colon Specific Genes and Proteins
: NUMBER OF SEQUENCES: 24
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,
: ADDRESSEE: Stewart & Olstein
: STREET: 6 Becker Farm Road
: CITY: Roseland
: STATE: NJ
: COUNTRY: USA
: ZIP: 07068-1739
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: PCT/US95/07289
: FILING DATE: 06-JUN-1995
: CLASSIFICATION:
: ATTORNEY/AGENT INFORMATION:
: NAME: Ferraro, Gregory D.
: REGISTRATION NUMBER: 36,134
: REFERENCE/DOCKET NUMBER: 325800-265
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 201-994-1700
: TELEFAX: 201-994-1744
: INFORMATION FOR SEQ ID NO: 9:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 228 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: PCT-US95-07289-9

Alignment Scores:
Pred. No.: 2,38e-97 Length: 228
Score: 1203.00 Matches: 228
Percent Similarity: 100.00% Conservative: 0
Best Local Similarity: 100.00% Mismatches: 0
Query Match: 22.36% Indels: 0
Gaps: 0
DB: 5

US-09-049-696-20 (1-2983) x PCT-US95-07289-9 (1-228)

QY 1993 GGTCTACTCAAGTATTTTCACAACTTATGACAGCAAGTAGATACAGTGAAGTGGCG 2052
: |||||
Db 1 ValTyrSerArgTyrPheThrThrTyrAspPThrAsnGlyArgTyrSerValIysValArg 20
QY 2053 GCTCTGGAGAGACTTAAACGACGACGAGAGAGTATACCCAGCAGAGTGGAGCAGT 2112
: |||||
Db 21 AlaLeuGlyValAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAlaAla 40
QY 2113 TACATACCTGGCGGATGTTGAGATGATGAATGATGATGATGATGATGATGATGAT 2172
: |||||
Db 41 TyrIleProGlyTyrPheGlyLysAsnAspGluIleGlnTrpAsnProProArgProGluIle 60
QY 2173 AATAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2232
: |||||
Db 61 AsnLysAspAspValGlnHisLysGlnValCysPheSerArgThrSerSerGlyLysIle 80
QY 2233 TTGTGGCTTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2292
: |||||
Db 81 PheValAlaSerAspValAlaProAsnAlaProIleProAspLeuPheProProGlyGlnIle 100
QY 2293 ACCGACCTGAAGCGGAAATTCACGGGGGAGCTCATTAATCTGAGTGGAGAGCTCT 2352
: |||||

```

```

Db 101 ThrAspLeuYsAlaGluIleHisGlySerLeuIleAsnLeuThrTrpThrAlaPro 120
Oy 2353 GGGGATGATTTATGACCATGGAACACCTCACAGTATATCATCTGCAATAGTCAAGTATT 2412
Db 121 GlyAspAspTyrAspHisGlyThrIleHisLysTyrIleIleArgIleSerThrSerIle 140
Oy 2413 CTGATGTCAGACAGACAGTCAATGAACTCTTCAAGTAACTAGTACGCTCATCCCA 2472
Db 141 LeuAspLeuArgAspLysPheAsnGlnSerLeuGlnValAsnThrThrAlaLeuIlePro 160
Oy 2473 AAGGAAGCCAACTGTGAGAGACGCTTTTGTAAACAGAAACATTACTTTGAAAT 2532
Db 161 LysGlnAlaAsnSerGlnGlnValAlaPheLeuPheLysProGlnAsnIleThrPheGln 180
Oy 2553 GGCAAGATCTTTTCATTCCTTTCAGGCTGTGATTAAGTGCATGCAATCAACAATA 2592
Db 181 GlyThrAspLeuPheIleAlaIleGlnAlaValAspLysValAspLeuLysSerGlnIle 200
Oy 2593 TCCAACTATGACAGAGTATCTTTGTTTATCTCTCCACAGACTCCGCGAGAGACCTAGT 2652
Db 201 SerAsnIleAlaArgValSerLeuPheIleProProGlnThrProProGlnThrProSer 220
Oy 2653 CCTGATGAACGCTGCTGCTTGT 2676
Db 221 ProAspGlnThrSerAlaProCys 228

RESULT 12
US-09-193-562D-13
; Sequence 13, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 13
; LENGTH: 342
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
; -09-193-562D-13

Alignment Scores:
Pred. No.: 7.3e-75 Length: 342
Score: 947.50 Matches: 182
Percent Similarity: 72.06% Conservative: 45
Best Local Similarity: 57.78% Mismatches: 83
Query Match: 17.61% Indels: 5
DB: 4 Gaps: 4

US-09-049-696-20 (1-2983) x US-09-193-562D-13 (1-342)
Oy 46 GTGTTCACTTTCATCTTACCTTGTAGAAAGGGCCCTGAGTAATTCATCTATTCAGCTG 105
Db 8 IleLeuPheLeuThrLeuHisLeuLeuProGly---MetLysSerSerMetValAsnLeu 26
Oy 106 AACAAATAGCTATGAAAGCATGTGCTGTGCAATGCAGCCCAATGTGCCAGAGATGAA 165
Db 27 IleAsnAsnGlyTyrAspGlyIleValIleAlaIleAsnProSerValProGlnAspGln 46
Oy 166 ACATCATTCACAAATAAGACATGGTACCCAGCATCTCTATCTGTTCAGCT 225
Db 47 LysLeuIleGlnAsnIleLysGlnMetValThrGlnAlaSerThrTyrLeuPheHisAla 66
Oy 226 ACAGGAAGCGATTTATTTCAAAATGTGGCATTTTGCATTCGTGAACATGGAAGACA 285

```

```

Db 67 ThrLysArgArgValTyrPheArgAsnValSerIleLeuIleProMetThrTrpLysSer 86
Oy 286 AAGCGTCACTATGTAGACCAAACTGAGACCTCAAAATGCGATGTTCTGCTGCT 345
Db 87 LysSerGlnTyrPheIleProLysGlnGlnSerTyrAspGlnAlaValIleValAla 106
Oy 346 GAGTCTACTCCCTCCAGTAATGATGACCTTACACTGAGCAGATGGCAACTGTGGAGAG 405
Db 107 AsnProTyrLeuLysTyrGlyAspAspProTyrThrLeuGlnTyrGlyArgCysGlyLeu 126
Oy 406 AAGGTGAAGAGATCCACCTCAGTCTGATTTGATTCAGAGAAAAGTTAGCTGAATAT 465
Db 127 LysGlyLysTyrIleHisPheThrProAsnPheLeuThrAsnAsnPheHisIleTyr 146
Oy 466 GGACCAACAAGGAGGCAATTTGTCATAGTCGGCTCATACGATGGGAGTATTTAG 525
Db 147 GlySerArgGlyArgValPheValHisGlnTyrPalahisLeuArgTrpGlyIlePheAsp 166
Oy 526 GAGTACAATTAATGATGAGAAATTTCTACTTATCC---AATGGAAGATACAGCAGTAA 582
Db 167 GlnTyrAsnValAspGlnProPheTyrIleSerArgLysAsnThrIleGlnAlaThrArg 186
Oy 583 TGTTCAGCAGGTATTACTGTGTAACAATGTAGTA---AAGAACTGTCAGGAGGAGCTGT 639
Db 187 CysSerThrHisIleThrGlyIleAsnValAlaPheLysLysCysProGlyGlySerCys 206
Oy 640 TACACCAAAAGATGCACATTCATTAAGTACAGAGCTGTATGAAAAAGATGTGATTT 699
Db 207 IleThrSerLeuCysArgArgAspSerGlnThrGlyLeuTyrGlnAlaLysCysThrPhe 226
Oy 700 GTTCTCAATCCCGCCACAGGAGGAGAGGCTTCTATATGTTTGCACAAATGTTGATCT 759
Db 227 LeuProLysLysSerGlnThrAlaLysGlnSerIleMetPheMetProSerLeuHisSer 246
Oy 760 ATAGTTGAATTCGTGACAAACAACAACAACAAGAGCTCCAAACAAGCAAAATCA 819
Db 247 ValThrGlnPheCysThrGlnLysThrHisAsnThrGlnAlaProAsnLeuGlnAsnLys 266
Oy 820 AATGCATTCCTCGAAGACATGGAAGTGAATCCGTGATTCGTGAGAGCTTTAAGAAAAC 879
Db 267 MetCysAsnGlyLysSerThrTrpAspValIleMetAsnSerValAspPheGlnAsnThr 286
Oy 880 ACTCCTATGACA-----ACACAGCCACCAATCCACCTTCTCATTCCTGAGATGGA 933
Db 287 SerProMetThrGlnMetAsnProProThrHisProThrPheSerLeuLeuLysSerLys 306
Oy 934 CAAGAATTTGCTGTTAGTCTTGACAAATCTGGAACATGGCG 978
Db 307 GlnArgValValCysLeuValLeuAspLysSerGlySerMetSer 321

RESULT 13
US-09-193-562D-3
; Sequence 3, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 3
; LENGTH: 203
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 associated protein from bovine endothelial cells
; US-09-193-562D-3

Alignment Scores:

```







```

Db 708 ThrValLysAspAlaThrAlaAsnAspAlaAspLysLysValAlaThrValLysAspVal 727
QY 1330 GCTTGGGGCCCTCGACACCTCAAGACACTAGAGAGCTCTCCAAAATGCACAGAGTTTA 1389
Db 728 AlaThrAlaIleAsnSerIleAlaThrPheValLysThrGluAsnLeuThrThrSerIle 747
QY 1390 CAGACATATGCTTCAGATCAATGCAGACATGGCCCTCATGGAGCTTTGGGGCCCTT 1449
Db 748 Asp-----GluAspAsnProThrAspAsnGlyLysAspAsp-----AlaLeu 761
QY 1450 TCATCAGCAAAAT-----GGAGCTGTCTCTCAGCCGCTCCATCCAGCTTGAGAGCT 1497
Db 762 LysAlaGlyAspThrLeuThrPheLysAlaGlyLysAsnLeuLysValLysAspGly 781
QY 1498 AAGGATTAAACCTC-----CAGAACACCCAGCTGATGAATGCGACAGTATCTGTG 1548
Db 782 LysAsnIleThrPheAspLeuAlaLysAsnLeuGluValLysThrAlaLysValSerAsp 801
QY 1549 GACAGACCGCTGGGAAAGACACTTGTCTTATCAGCTGACCAACGACGCTCCCA 1608
Db 802 ThrLeuThrIleGlyGlyAsnThr-----ProThrGlyGlyThrThrAlaThrProLys 819
QY 1609 ATC----- 1611
Db 820 ValAsnIleThrSerThrAlaAspGlyLeuAsnPheAlaLysGluThrAlaAspAlaSer 839
QY 1612 -----CTTCTCTGGGATCCAGTGACAG 1635
Db 840 GlySerLysAsnValTyrLeuLysGlyIleAlaThrThrLeuThrGluProSerAlaGly 859
QY 1636 AAGCAAGGTGGCTTGTGA-----GTGGACAAAACACCAAAATGGCCCTACCTCCA 1686
Db 860 AlaLysSerSerHisValAspLeuAsnValAspAlaThrLysLysSerAsnAlaAspSer 879
QY 1687 ATCCAGGACATGTCAAGGTTGACCTTGAATACAGTCTGCAAGCAAGCTCACAAACC 1746
Db 880 IleGluAspValIleuAlaGly-----TpaAsnIleGlnGlyAsnLysAsnAsn 896
QY 1747 TTGACCCCTGACTGTACGCTCCGCTGCTCAATGCTACC-----CTGCTT 1791
Db 897 ValAspTyrValAlaThrTyrAspThrValAsnPheThrAspAspSerThrGlyThrThr 916
QY 1792 CCAATTACAGTACTTCCAAAACGAACGACACCGAAATTCGCCGCCCTCTGGTA 1851
Db 917 ThrValThrValThrGlnLysAlaAspGlyLysGly----- 928
QY 1852 GTTATGCAAAATATTCGCCAAGAGCTCCCAATTCAGGGCAGTGTACAGGCTTG 1911
Db 929 -----AlaAspValLysIleGlyAlaLys-----ThrSerVal 939
QY 1912 ATTGAATCAGTATGAGAAAACAGTTACC-----TTGAACTACTGATTAATGAGACAGT 1968
Db 940 IleLysAspHisAsnGlyLysLeuPheThrGlyLysAspLeuLysAspValAsnAsnGly 959
QY 1969 GCTGATGCTACTAAGAGTACGCT-----GCTCACTCAAGGTAT 2007
Db 960 AlaThrValSerGluAspAspGlyLysAspThrGlyThrGlyLeuValThrAlaLys-- 978
QY 2008 TTCACACTTATGACAGCAATGTAGTAAATCACTAAATCGGAGCTCTGGGA----- 2061
Db 979 ---ThrValIleAspAlaValAlaAsnLysSerGlyTyrPargValThrGlyGlnLysAlaThr 997
QY 2062 -----GGAGTTAAGCAGCAGCAGCAGAGAGTATACCCAGAGAGT 2103
Db 998 AlaGluThrGlyAlaThrAlaValAlaAsnAlaGlyAlaAsnAlaGluThrValThrSerGlyThr 1017
QY 2104 GGAGACACTGATACATACCTGGCTGGATGTGAGATGATGAATATCATGGAATCCACCAACA 2163
Db 1018 SerValAsnPheLysAsnGly-----AsnAlaThrThrThr 1028
QY 2164 CCTGAATTAATATAGCAT-----GATGTT----- 2187

```

```

Db 1029 AlaThrValSerLysAspAsnGlyAsnIleAsnValLysTyrAspValAsnValGlyLys 1048
QY 2188 -----CAACACAGCAAGCTGTCTTCACAGACATCC-----TCG 2223
Db 1049 GlyLeuLysIleGlyAspAspLysLysIleValAlaAspThrThrThrLeuThrValThr 1068
QY 2224 GAGGCTCATTTGTG-----GCTTCGATGTCCCAAAATGCCCATACCTGAT 2271
Db 1069 GlyGlyLysValSerValProAlaGlyAlaAsnSerValAsnAsn----- 1083
QY 2272 CTCTTCCACCTGGCCAAATCACCGACCTGAAGCGGGAATTCACGGGGCAGTCTAAT 2331
Db 1084 -----AsnLysLysLeuValAsnAlaGluGlyLeuAlaThrAlaLeuAsn 1098
QY 2332 AATCTGACTTGACAGCTCTCGGATGATTTTGACCATGA 2373
Db 1099 AsnLeuSerTyrThrAlaLysAlaAspLysTyrAlaAspGly 1112

RESULT 15
US-08-409-995-4
; Sequence 4, Application US/08409995
; Patent No. 5646259
; GENERAL INFORMATION:
; APPLICANT: Barenkamp, Stephen I.
; TITLE OF INVENTION: Haemophilus Adhesion Proteins
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESS: Flehr, Hohbach, Test, Albritton & Herbert
; STREET: Four Embarcadero Center, Suite 3400
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111-4187
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/409,995
; FILING DATE: 24-MAR-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Silva, Robin W.
; REGISTRATION NUMBER: 38,304
; REFERENCE/DOCKET NUMBER: A-61053/RFT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 781-1989
; TELEFAX: (415) 398-3249
; TELEX: 910 277299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1912 amino acids
; TYPE: amino acid
; STRANDEDNESS: double
; TOPOLOGY: unknown
; US-08-409-995-4

Alignment Scores:
Pred. No.: 0.000788 Length: 1912
Score: 141.50 Matches: 181
Percent Similarity: 31.95% Conserved: 128
Best Local Similarity: 18.72% Mismatches: 371
Query Match: 2.63% Indels: 288
DB: 1 Gaps: 44

US-09-049-696-20 (1-2983) x US-08-409-995-4 (1-1912)
QY 274 ACATGGAAGACAAAGCTGACTATGTGAGACCAAAATTGAGACCTACAAAAATGCTGAT 333
Db 428 SerTyrLysAlaLysAlaGlu-----AlaAsp 436

```

QY 334 GTTCTGCTGCTACTCTCCTCCAGTAATGATGAAACCCCTACACTGAGCAGATGGC 393  
 Db 437 -----ThraspglyAlaLeuGlulylIleSerLysaspGlnGluVal 450  
 QY 394 AACTGTGAGAGAAAGGTGAAGATCCACCTCCTCATTTTCATTGAGGAAAAAG 453  
 Db 451 LysAlaGlyGlu-----ThraValThrPheLysAlaGlyLysAsn 463  
 QY 454 TTAGCTGAATATGAGCCACAGGTAGGGCATTTGCTCCATGAG----- 495  
 Db 464 Leu---LysValLysGlnaspGlyAlaAsnPheThrTyrSerLeuGlnaspAlaLeuThr 482  
 QY 496 ----TGGCTCATCTACAGTGGGAGTATTGACAGTACATATGATGAAATTTCTAC 552  
 Db 483 GlyLeuThrSerIleThrLeuGlyGlyThrThrAsnGlyLysAsnPalatylsThrVal 502  
 QY 553 TTATTC---AATGGAAGAAATACAAAGAGTAAGATGTTCCACGAGTATTACTGGTACAAT 609  
 Db 503 IleAsnLysaspGlyLeuThrIleThrProAlaGlyAsnGlyLysThrThrGlyThrAsn 522  
 QY 610 GTAGTAAGAAGTGTGAGGAGCAGCTGTACACCAAAAGATGACATTCATTAAGTA 659  
 Db 523 ThrIleSerValThrLysaspGlyIleLysAlaGlyAsnLysAlaIleThrAsnValAla 542  
 QY 670 ACAGGACTC-----TATGAAAAAGATGTGAGTTGTTCTCCAAATCCCGCCAGAGGAG 723  
 Db 543 SerGlyLeuThrGlyAlaTyrAspAspAlaAsnPheaspValLeuAsnSerAlaThrAsp 562  
 QY 724 AAGGCTTCATATGTTTGCAACAAGTGTGATTCTATTGATTGAAATTCGTACAGAACAA 783  
 Db 563 -----LeuAsnAlaGlnHisValGlnaspAlaTyrLysGlyLeuLeu----- 575  
 QY 784 AACCAACAAGAAAGAGTCCCAACAGCAAAATCAAAATGCAATCCGAGACACATGG 843  
 Db 576 AsnLeuAsnGlnLysAsnAlaAsnLysGln----- 585  
 QY 844 GAAGTATCCGTGATCTGAGGACTTTAAGAAAACACTCCTCTGACACACAGCCACCA 903  
 Db 586 -----ProLeuValThrAspSerThr 592  
 QY 904 AATCCACCTTCATTCATTCGTCGAGATTGCAAAAGATTTGTGTAGTCCTTGACAAA 963  
 Db 593 AlaAlaThrValGlyLysLeu-----ArgLysLeuGlyTyrPalValSerThrLys 609  
 QY 964 TCTGCAAGCATGCGACTGTAAACCGCTCAATCGATGATCAAGCAGGCGACTTTTC 1023  
 Db 610 AsnGly-----ThrLysGlnGlnSerAsnGlnValLysGlnAlaAspGlnVal--- 625  
 QY 1024 CTGCTGCACACAGTTGAGCTGGGGTCTCGGTTGGAGTGTGACATTTGACAGTGTGCC 1083  
 Db 626 -----LeuPheThrGlyAlaGlyAlaAlaThrValThrSerLysSer 639  
 QY 1084 CATGTACAAGTGAACCTACATACAGATAACAGTGGC----- 1119  
 Db 640 GluAsnGlyLysHisThrIleThrValSerValAlaGlnThrLysAlaAspCysGlyLeu 659  
 QY 1120 ---AGTGCAGGAGCACACTCGCCAAAGATTAAC----- 1152  
 Db 660 GluLysaspGlyAspThrIleLysLeuLysValAspAsnGlnAsnThrAspAsnValLeu 679  
 QY 1153 GCAGCAGCTTCAGAGGAGCGCTCATCTGCAGCGGCTTCGATCGCATTTACTGTGATT 1212  
 Db 680 ThrValGlyLysAsnGlyThrAlaValThrLysGly-----GlyPheGlnThrVal 696  
 QY 1213 AGGAAGAATATCCAACTGATGATCTGAATTTGCTGCTGACGAGTGGGGAAGACAAC 1272  
 Db 697 ---LysThrGlyAlaThrAspAlaAspArg-----GlyLysValThr 709  
 QY 1273 ACTATAGTGGTGTCTTAAGAGCTCAACAAAGTGTGCTCATCATCCACAGAGCGCT 1332  
 Db 710 ValLysaspAlaThrAlaAsnAspAlaAspLysValAlaThrValLysaspValAla 729  
 QY 1333 TTGGGGCCCTCTCAGCTCAAGAACTAGAGAGCTGTCCAAAATGACAGGAGTTTACAG 1392

Db 730 ThrAlaIleAsnSerAlaAlaThrPheValLysThrGluAsnLeuThrThrSerIleAsp 749  
 QY 1393 ACATATGCTTCATGATCAAGTTGCAACAAATGGCTCATGATCTTTGGGCGCTTCA 1452  
 Db 750 -----GluAspAsnProThrAspAsnGlyLysAspAsp-----AlaLeuLys 763  
 QY 1453 TCAGGAAT-----GGAGCTGTCTCAGCGCTCATCCAGCTTGAGAGTAAG 1500  
 Db 764 AlaGlyAspThrLeuThrPheLysAlaGlyLysAsnLeuLysValAspArgaspGlyLys 783  
 QY 1501 GGATTAACCTC-----CAGAACAGCACTGGATGATGATGGCACAGTACGTGGAC 1551  
 Db 784 AsnIleThrPheAspLeuAlaLysAsnLeuGlnValLysThrAlaLysValSerAspThr 803  
 QY 1552 AGCAGCTGGGAAGAGCACTGTGTTCTTATCAGCTGCAGCAGCAGCGCTCCCAAAAT 1611  
 Db 804 LeuThrIleGlyLysAsnThr-----ProThrGlyGlyThrThrAlaThrProLysVal 821  
 QY 1611 ----- 1611  
 Db 822 AsnIleThrSerThrAlaAspGlyLeuAsnPheAlaLysGlnThrAlaAspAlaSerGly 841  
 QY 1612 -----CTTCTCGGATCCCACTGAGCAGCAAG 1638  
 Db 842 SerLysAsnValThrLeuLysGlyIleAlaThrThrLeuThrGlnProSerAlaGlyAla 861  
 QY 1639 CAAGGTGGCTTTGTA-----GTGGACAAAACACCAAAATGGCGCTACCTCAAAAT 1689  
 Db 862 LysSerSerHisValAspLeuAsnValAspAlaThrLysLysSerAsnAlaIleSerIle 881  
 QY 1690 CCAGGATTCGTAAAGTTGCGCACTTGGAATATACAGTGTGCAACCAAGCTCAACAACTTG 1749  
 Db 882 GluAspThrLeuThrGlyAlaGly-----TrpAsnIleGlnGlyAsnAsnVal 898  
 QY 1750 ACCCTGACTCAGCTCCCGCTGGCTCCATGCTACC-----CTGCCTCCA 1794  
 Db 899 AspTyrValAlaThrThrLysAspThrValAsnPheThrAspAspSerThrGlyThrThrThr 918  
 QY 1795 ATTACAGTACTCCCAAAAGCAAGACAGACACAGCAAAATTTCCAGCCCTGTGAGTT 1854  
 Db 919 ValThrValThrGlnLysAlaAspGlyLysGly----- 929  
 QY 1855 TATGCAAAATTTGCCAAGAGAGCTCCCAATTCAGAGGCCAGTGTACAGCGCTGATT 1914  
 Db 930 ---AlaaspValLysIleGlyAlaLys-----ThrSerValIle 941  
 QY 1915 GAATCAGTGAATGAAAAACAGTTACC---TTGGAACTACTGATATGAGCAGAGTGTCT 1971  
 Db 942 LysAspHisAsnGlyLysLeuPheThrGlyLysAspLeuLysAspAlaAsnAsnGlyAla 961  
 QY 1972 GATGTACTACAGGATGACGT-----GTTACTCAAGGTATTTTC 2010  
 Db 962 ThrValSerGlnAspAspGlyLysAspThrGlyThrGlyLeuValThrAlaLys----- 979  
 QY 2011 ACAACTTATGACAGATGTAGATACAGTGTAAAGTGGCGCTCGGA----- 2061  
 Db 980 ThrValIleAspAlaValAsnLysSerGlyTyrArgValThrGlyGlnGlyAlaThrAla 999  
 QY 2062 -----GGAGTTAACCGACGCCAGCAGGAGAGTGTATCCCGCAGAGTGA 2106  
 Db 1000 GluThrGlyAlaThrAlaValAsnAlaGlyAsnAlaGlnThrValThrSerGlyThrSer 2109  
 QY 2107 GCAGTGCATACCTGCGCTGATGTAAGATGAAATACAAATGATCACCAAGACGT 2166  
 Db 1020 ValAsnPheLysAsnGly-----AsnAlaThrThrAla 1030  
 QY 2167 GAATTAATTAAGAT-----GATGTT----- 2187  
 Db 1031 ThrValSerLysAspAsnGlyAsnIleAsnValLysTyrAspValAsnValGlyAspGly 1050  
 QY 2188 -----CAACCAAGCAAGTGTGTTTCAGCAGCAACATCC-----TCGGGA 2226

```
Db 1051 LeuLysIleGlyAspAspLysLysIleValAlaAspThrThrLeuThrValThrGly 1070
OY 2227 GGCTCATTTGTG-----GCTTCTGATGTCCTCCAAATGCTCCCATACCTGATCTC 2274
Db 1071 GlyLysValSerValProAlaGlyAlaAsnSerValAsnAsn-----1084
OY 2275 TTCCCACTGGCCAAATCAGCAGCAAGCTGAAGGAAATTCACGGGGGCGAGTCTCATTAAT 2334
Db 1085 -----AsnLysLysLeuValAsnAlaGlyGlyLeuAlaThrAlaLeuAsnAsn 1100
OY 2335 CTGACTTGAGACGCTCTGGGGATGATTATGACATGGAACGCTCACAGTATATC--- 2391
Db 1101 LeuSerTrpThrAlaLysAlaAspLysTyrAlaAspGlyGluSerGlyGlyIleThrAsp 1120
OY 2392 -----ATTGCAATTAAGT 2403
Db 1121 GluGluValLysAlaGlyAspLysValThrPheLysAlaGlyLysAsnLeuLysValLys 1140
OY 2404 ACAAGTATCTGATCTGATCAGACAGACAAATTCAATGATCTTCAAGTGAATPACTAGTCT 2463
Db 1141 GluSerGluLysAspPheThrLysSerLeuGlnAspThrLeuThrGlyLeuThrSerIle 1160
OY 2464 CTCATCCCAAGAACCCAAC-----TCTGAGGAGTCTTTTGTGTTAAACGAGAAAAC 2517
Db 1161 ThrLeuGlyGlyThrAlaAsnGlyArgAsnAspThrGlyThrValIleAsnLysAspGly 1180
OY 2518 ATTACTTT-----GAAATGGCACAGAT 2541
Db 1181 LeuThrIleThrLeuAlaAsnGlyAlaAlaAlaGlyThrAspAlaSerAsnGlyAsnThr 1200
OY 2542 CTTTCATTTGCTATTCAGGCTGTGATTA--GGTCGATCTGAATCAGAAATATCCACAT 2600
Db 1201 IleSerValThrLysAspGlyIleSerAlaGlyAsnLysGluIleThrAsnValLys--- 1219
OY 2601 TGCACAGATATCTTGTATTATCTCCACAGACTCCGCCAGAGACACCTAGTCTGATGA 2660
Db 1220 ---SerAlaLeuLysThrTyrLysAspThrGlnAsnThrAlaAspGlu----- 1234
OY 2661 AACGTCTGCTCTTCTCTAATATTCATATCAACAGCACCATCTCTGGCATTCACATTTT 2720
Db 1235 -----ThrGlnAspLysGluPheHisAlaAlaVal 1244
OY 2721 AAAAATTATGTGAGTGGAT 2741
Db 1245 LysAsnAlaAsnGluValGlu 1251
```

Arch completed: October 17, 2002, 19:02:30  
Time : 57.7632 secs

***This Page Blank (uspto)***

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 60.6431 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-19

Perfect score: 1683

Sequence: 1 AACAAAGTGTGTCATCATC.....AAATGCTAAACACTGGGTA 1683

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database : Issued\_Patents\_NA.\*

- 1: /cgn2\_6/ptodata/2/1na/5A\_COMB.seq.\*
- 2: /cgn2\_6/ptodata/2/1na/5B\_COMB.seq.\*
- 3: /cgn2\_6/ptodata/2/1na/6A\_COMB.seq.\*
- 4: /cgn2\_6/ptodata/2/1na/6B\_COMB.seq.\*
- 5: /cgn2\_6/ptodata/2/1na/PCTUS\_COMB.seq.\*
- 6: /cgn2\_6/ptodata/2/1na/Dackfile1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1676.6	99.6	3007	US-09-193-562D-27	Sequence 27, Appl
2	790.8	47.0	878	US-08-469-667-8	Sequence 8, Appl
3	790.8	47.0	878	US-09-224-110-8	Sequence 8, Appl
4	790.8	47.0	878	PCT-US95-07289-8	Sequence 8, Appl
5	414.4	24.6	3317	US-09-193-562D-1	Sequence 1, Appl
6	398.8	23.7	3022	US-09-193-562D-33	Sequence 33, Appl
7	368.2	21.9	3418	US-09-193-562D-29	Sequence 29, Appl
8	300	17.8	2970	US-09-193-562D-31	Sequence 31, Appl
9	228.2	13.6	576	US-09-385-982-23	Sequence 23, Appl
10	221.4	13.2	595	US-09-385-982-25	Sequence 25, Appl
11	200.8	11.9	618	US-09-385-982-24	Sequence 24, Appl
12	183.4	10.9	611	US-09-385-982-27	Sequence 27, Appl
13	168.6	10.0	742	US-09-385-982-33	Sequence 33, Appl
14	95.4	5.7	335	US-09-193-562D-14	Sequence 14, Appl
15	41.4	2.5	7218	US-08-233-463-14	Sequence 14, Appl
16	36.6	2.2	2854	US-08-936-165A-66	Sequence 66, Appl
17	36.4	2.2	8700	US-08-392-625-16	Sequence 16, Appl
18	36.4	2.2	8700	US-08-466-961A-16	Sequence 16, Appl
19	36.4	2.2	8700	US-08-464-517B-18	Sequence 18, Appl
20	36	2.1	3158	US-08-464-517-36	Sequence 36, Appl
21	36	2.1	3158	US-08-246-361A-36	Sequence 36, Appl
22	36	2.1	3158	US-08-463-772-36	Sequence 36, Appl
23	35.6	2.1	4211	US-09-004-838-106	Sequence 106, App
24	35.2	2.1	3038	US-09-276-6531-107	Sequence 107, App
25	34.8	2.1	805	US-08-118-469A-6	Sequence 6, Appl
26	34.8	2.1	805	US-08-909-119-6	Sequence 6, Appl
27	34.8	2.1	19124	US-08-487-826B-13	Sequence 13, Appl

28	34.6	2.1	5923	US-09-064-922-3	Sequence 3, Appl
29	33.8	2.0	1556	US-08-871-572B-2	Sequence 2, Appl
30	33.8	2.0	2255	US-08-871-572B-3	Sequence 3, Appl
31	33.6	2.0	3182	US-08-971-395-1	Sequence 1, Appl
32	33.6	2.0	3183	US-08-413-135-1	Sequence 1, Appl
33	33.6	2.0	4090	US-08-569-214-4	Sequence 4, Appl
34	33.6	2.0	4090	US-08-937-236-4	Sequence 4, Appl
35	33.6	2.0	4810	US-08-852-629-11	Sequence 11, Appl
36	33.2	2.0	2520	US-08-454-557C-50	Sequence 50, Appl
37	33.2	2.0	2520	US-08-340-426D-50	Sequence 50, Appl
38	33.2	2.0	2520	US-08-450-673C-50	Sequence 50, Appl
39	33.2	2.0	2520	PCT-US95-17111A-50	Sequence 50, Appl
40	33.2	2.0	3095	5231168-1	Patent No. 5231168
41	33.2	2.0	10684	US-08-618-100B-3	Sequence 3, Appl
42	33	2.0	1984	US-07-885-970A-25	Sequence 25, Appl
43	33	2.0	1985	US-08-298-687A-25	Sequence 25, Appl
44	33	2.0	1985	US-08-298-829-25	Sequence 25, Appl
45	33	2.0	2510	US-08-894-324A-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1									
US-09-193-562D-27									
Sequence 27, Application US/09193562D									
Patent No. 6309857									
GENERAL INFORMATION:									
APPLICANT: Pauli, Benedict U.									
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium									
FILE REFERENCE: 18617.0052									
CURRENT APPLICATION NUMBER: US/09/193,562D									
CURRENT FILING DATE: 1998-11-17									
PRIOR APPLICATION NUMBER: US/60/065,922									
PRIOR FILING DATE: 1997-11-17									
NUMBER OF SEQ ID NOS: 47									
SEQ ID NO 27									
LENGTH: 3007									
TYPE: DNA									
ORGANISM: Homo sapiens									
US-09-193-562D-27									
Query Match									
Best Local Similarity 99.6%; Score 1676.6; DB 4; Length 3007;									
Matches 1679; Conservative 0; Mismatches 4; Indels 0; Gaps 0;									
OY	1	AACAAAGTGTGTCATCATC	ACACAGTCGTTGGGCCCTGTCAGCTCAAGACTAG	60					
DB	1323	AACAAAGTGTGTCATCATC	ACACAGTCGTTGGGCCCTGTCAGCTCAAGACTAG	1382					
OY	61	AGGAGCTGTC	AAATGACAGAGGTTTACACATATGCTTCAGATCAAGTTCA	120					
DB	1383	AGGAGCTGTC	AAATGACAGAGGTTTACACATATGCTTCAGATCAAGTTCA	1442					
OY	121	ATGGGCTATGATGATCTTTTGGGCGCTTATACAGAAAGGAGACTGCTCTCGAGCCT	180						
DB	1443	ATGGGCTATGATGATCTTTTGGGCGCTTATACAGAAAGGAGACTGCTCTCGAGCCT	1502						
OY	181	CCATCAGCTTGAGAGTAAAGGATTAACCTCCCAACAGCAGCAGATGATGACAG	240						
DB	1503	CCATCAGCTTGAGAGTAAAGGATTAACCTCCCAACAGCAGCAGATGATGACAG	1562						
OY	241	TGATGCTGAGACGACCGTGGGAAGACACTTTTCTTATACCTGACACGACG	300						
DB	1563	TGATGCTGAGACGACCGTGGGAAGACACTTTTCTTATACCTGACACGACG	1622						
OY	301	CTCCCAATCTTCTCTGAGATCCAGTGAACAAAGAGGCTTGTAGTGACA	360						
DB	1623	CTCCCAATCTTCTCTGAGATCCAGTGAACAAAGAGGCTTGTAGTGACA	1682						
OY	361	AAACACCAAAATGCTACCTCCAAATCCAGGATGCTAAGTTGGCACTTGAAT	420						

Db 1683 AAAACACCAAAATGGCTACCTCCAAATCCAGGCAATGCTTAAGTTGGCACTTGGCAAT 1742  
QY 421 ACAGCTGCAAGCAAGCTCAACAACCTTGACCTCTGACTGCTCAGCTCCGTCGCTCATG 480  
Db 1743 ACAGCTGCAAGCAAGCTCAACAACCTTGACCTCTGACTGCTCAGCTCCGTCGCTCATG 1802  
QY 481 CTACCTGCTCCAAATTTACAGTACTTCCAAAAGAAAGACACACAGCAATTTCCCA 540  
Db 1803 CTACCTGCTCCAAATTTACAGTACTTCCAAAAGAAAGACACACAGCAATTTCCCA 1862  
QY 541 GCGCTGAGTATTTAGCAATATTCGCAAGAGCGCTCCCAATTCAGGCGCAGT 600  
Db 1863 GCGCTGAGTATTTAGCAATATTCGCAAGAGCGCTCCCAATTCAGGCGCAGT 1922  
QY 601 TCACAGCCCTGATTTGATGATGATGATGATGATGATGATGATGATGATGATGATG 660  
Db 1923 TCACAGCCCTGATTTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1982  
QY 661 GAGCAGGTGCTGATGCTACTAAGATGACGGTGTCTACTCAAGGTATTTTCAACATTTATG 720  
Db 1983 GAGCAGGTGCTGATGCTACTAAGATGACGGTGTCTACTCAAGGTATTTTCAACATTTATG 2042  
QY 721 ACACGATGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 780  
Db 2043 ACACGATGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2102  
QY 781 GAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 840  
Db 2103 GAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2162  
QY 841 AAATACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 900  
Db 2163 AAATACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2222  
QY 901 TGTGTTTACAGCAACATCTCTCGGAGGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 960  
Db 2223 TGTGTTTACAGCAACATCTCTCGGAGGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2282  
QY 961 CCATACCTGATCTCTCTCCAGCTGCGCAATTCACCCAGCTGGAAGCGGAATTCACGGG 1020  
Db 2283 CCATACCTGATCTCTCTCCAGCTGCGCAATTCACCCAGCTGGAAGCGGAATTCACGGG 2342  
QY 1021 GCACTCTCATTAATCTGACTTTGACAGCTCTCGGGATGATTTATGACATGAAACAGCTC 1080  
Db 2343 GCACTCTCATTAATCTGACTTTGACAGCTCTCGGGATGATTTATGACATGAAACAGCTC 2402  
QY 1081 ACAAGTATCATTTGCAATTAAGTATGATGATGATGATGATGATGATGATGATGATGAT 1140  
Db 2403 ACAAGTATCATTTGCAATTAAGTATGATGATGATGATGATGATGATGATGATGATGAT 2462  
QY 1141 CTCTTCAAGTAACTACTGCTCTCTCATCCCAAGAGCAACTCTGAGGAAGTCTTTT 1200  
Db 2463 CTCTTCAAGTAACTACTGCTCTCTCATCCCAAGAGCAACTCTGAGGAAGTCTTTT 2522  
QY 1201 TGTTTAAACCAAGAACTATTCTTTGAAAATGGACAGATCTTTTCTATTGCTATTGAGG 1260  
Db 2523 TGTTTAAACCAAGAACTATTCTTTGAAAATGGACAGATCTTTTCTATTGCTATTGAGG 2582  
QY 1261 CTGTGTAAGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1320  
Db 2583 CTGTGTAAGGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2642  
QY 1321 TTCTTCCACAGACTCCGCGCAGAGACACTAGTCTGATGAAAGCTGCTGCTTGTCTTA 1380  
Db 2643 TTCTTCCACAGACTCCGCGCAGAGACACTAGTCTGATGAAAGCTGCTGCTTGTCTTA 2702  
QY 1381 ATATTCATATCAACAGACACTTCTGCGATTCACATTTTAAAAATTTATGTTGAAGTGA 1440  
Db 2703 ATATTCATATCAACAGACACTTCTGCGATTCACATTTTAAAAATTTATGTTGAAGTGA 2762  
QY 1441 TAGAGAACTGAGCTGCTCAATAGCCTGAGCTGATTTTGTTCAGATTAATTAATTA 1500  
Db 2763 TAGAGAACTGAGCTGCTCAATAGCCTGAGCTGATTTTGTTCAGATTAATTAATTA 2822

QY 1501 TCATTCATCCTTTTTTTTGTATTAATAATTTCTAATAATGATTTTGTAGACTTCTGTAG 1560  
Db 2823 TCATTCATCCTTTTTTTTGTATTAATAATTTCTAATAATGATTTTGTAGACTTCTGTAG 2882  
QY 1561 GGGCGATATCTAAATGATATGATGATGATGATGATGATGATGATGATGATGATGATG 1620  
Db 2883 GGGCGATATCTAAATGATATGATGATGATGATGATGATGATGATGATGATGATGATG 2942  
QY 1621 ATACTAAATGATTTTGTAGACTTCTGTAGGCGCGATTAATAATGATTAACACTG 1680  
Db 2943 ATACTAAATGATTTTGTAGACTTCTGTAGGCGCGATTAATAATGATTAACACTG 3002  
QY 1681 GTA 1683  
Db 3003 GGA 3005

RESULT 2  
US-08-469-667-8  
; Sequence 8, Application US/08469667  
; Patent No. 5733748  
; GENERAL INFORMATION:  
; APPLICANT: Yu, Guo-Liang  
; APPLICANT: Rosen, Craig  
; TITLE OF INVENTION: Colon Specific Genes and Proteins  
; NUMBER OF SEQUENCES: 24  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Carella, Byrne, Bain, Gillfillan, Cecchi,  
; STREET: 6 Becker Farm Road  
; CITY: Roseland  
; STATE: NJ  
; COUNTRY: USA  
; ZIP: 07068-1739  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/469,667  
; FILING DATE: 06-JUN-1995  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ferraro, Gregory D.  
; REGISTRATION NUMBER: 36,134  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 201-994-1700  
; TELEFAX: 201-994-1744  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 878 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 2..685  
; US-08-469-667-8

Query Match 47.0%; Score 790.8; DB 1; Length 878;  
Best Local Similarity 97.9%; Pred. No. 2.2e-230;  
Matches 820; Conservative 1; Mismatches 15; Indels 2; Gaps 2;

QY 692 TGTCTACTCAAGGATTTTCAACTATGACAGAAATGATGATGATGATGATGATGATGATG 751  
Db 1 TGTCTACTCAAGGATTTTCAACTATGACAGAAATGATGATGATGATGATGATGATGATG 60  
QY 752 GGTCTGGAGAGATTACCGACCGCAGAGAGAGATGCCACGACAGCTGAGACT 811

Db 61 GGCTCTGGGAGGAGTTAACGACGACGAGGAGTGTATCCCAAGCAGAGTGAGCACT 120  
QY 812 GTACATACCTGGCTGGATTTGAGATGATGAATPACAAATGGAATCCACCAAGCTGAAT 871  
Db 121 GTACATACCTGGCTGGATTTGAGATGATGAATPACAAATGGAATCCACCAAGCTGAAT 180  
QY 872 TAATAAGATGATGTTTCAACACAGCAAGTGTGTTTTCAGACAGACATCTCCGGAGGCTC 931  
Db 181 TAATAAGATGATGTTTCAACACAGCAAGTGTGTTTTCAGACAGACATCTCCGGAGGCTC 240  
QY 932 ATTGTGGCTTGTGATGTCCTCCAAATGCTCCATACCTGATCTCTCCACCTGGCCAAAT 991  
Db 241 ATTGTGGCTTGTGATGTCCTCCAAATGCTCCATACCTGATCTCTCCACCTGGCCAAAT 300  
QY 992 CACCGACCTGAAGGGGAAATTCAGGGGGGAGCTCATATATGCACTGTGAGAGCTCC 1051  
Db 301 CACCGACCTGAAGGGGAAATTCAGGGGGGAGCTCATATATGCACTGTGAGAGCTCC 360  
QY 1052 TGGGATGATTTATGACATGAGAAAGCTCACAAGTATATCATTCGATAAGTAAAGTAT 1111  
Db 361 TGGGATGATTTATGACATGAGAAAGCTCACAAGTATATCATTCGATAAGTAAAGTAT 420  
QY 1112 TCTGATCTCAGACAGCAAGTGAATCTCTTCAAGTAACTACTGCTCTCATCC 1171  
Db 421 TCTGATCTCAGACAGCAAGTGAATCTCTTCAAGTAACTACTGCTCTCATCC 480  
QY 1172 AAGGAGGCAAGCTGAGGAGTCTTTTGTAAACCAAAACATTAATCTTTGAAA 1231  
Db 481 AAGGAGGCAAGCTGAGGAGTCTTTTGTAAACCAAAACATTAATCTTTGAAA 540  
QY 1232 TGGCAGAGATCTTTTCAATGCTATTCAGGCTGTGTAAGTGTGATCTGAAATCAGAAAT 1291  
Db 541 TGGCAGAGATCTTTTCAATGCTATTCAGGCTGTGTAAGTGTGATCTGAAATCAGAAAT 600  
QY 1292 ATCCAACTTGGCAGAGATATCTTTGTTATTCCTCCACAGACTCCGCGAGAGACACTAG 1351  
Db 601 ATCCAACTTGGCAGAGATATCTTTGTTATTCCTCCACAGACTCCGCGAGAGACACTAG 660  
QY 1352 TCCGTATGAAAGTGTGCTCCCTGT-CTTAATATCATTCACAAGCAACATTCCTCGGA 1410  
Db 661 TCCGTATGAAAGTGTGCTCCCTGTGCTTAATATCATTCACAAGCAACATTCCTCGGA 720  
QY 1411 TTCACATTTTAAATATATGAGAGTGTGAGAGACTGAGAGTGTGTAAGTGTGATCTGAAAT 1470  
Db 721 TTCACATTTTAAATATATGAGAGTGTGAGAGACTGAGAGTGTGTAAGTGTGATCTGAAAT 780  
QY 1471 GCTGAATTTTGTGAGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 1528  
Db 781 GCTGAATTTTGTGAGATTTTGTGAGATTTTGTGAGATTTTGTGAGATTTTGTGAGATTTT 837

RESULT 3  
US-09-224-110-8  
; Sequence 8, Application US/09224110  
; Patent No. 6337195  
; GENERAL INFORMATION:  
; APPLICANT: YU, Guo-Liang  
; APPLICANT: ROSEN, Craig  
; TITLE OF INVENTION: Colon Specific Genes and Proteins  
; NUMBER OF SEQUENCES: 24  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,  
; STREET: 6 Becker Farm Road  
; CITY: Roseland  
; STATE: NJ  
; COUNTRY: USA  
; ZIP: 07068-1739  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/224,110  
; FILING DATE:  
; CLASSIFICATION:  
; PRIORITY APPLICATION DATA:  
; APPLICATION NUMBER: 08/469,667  
; FILING DATE: 06-JUN-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ferraro, Gregory D.  
; REGISTRATION NUMBER: 36,134  
; REFERENCE/DOCKET NUMBER: 325800-435  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 201-994-1700  
; TELEFAX: 201-994-1744  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 878 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 2..685  
; US-09-224-110-8

Query Match 47.0%; Score 790.8; DB 4; Length 878;  
Best Local Similarity 97.9%; Pred. No. 2.2e-230;  
Matches 820; Conservative 1; Mismatches 15; Indels 2; Gaps 2;

QY 692 TGTCTACTCAAGGTATTTTCAACAACTTATGACAGCAAGTGTGATGATACAGTGTAAAGTCCG 751  
Db 1 TGTCTACTCAAGGTATTTTCAACAACTTATGACAGCAAGTGTGATGATACAGTGTAAAGTCCG 60  
QY 752 GGCTCTGGGAGGAGTTAAACGACGACGAGAGTGTATACCCAGCAGAGTGAGCACT 811  
Db 61 GGCTCTGGGAGGAGTTAAACGACGACGAGAGTGTATACCCAGCAGAGTGAGCACT 120  
QY 812 GTACATACCTGGCTGGATTTGAGATGATGAATPACAAATGGAATCCACCAAGCTGAAT 871  
Db 121 GTACATACCTGGCTGGATTTGAGATGATGAATPACAAATGGAATCCACCAAGCTGAAT 180  
QY 872 TAATAAGATGATGTTTCAACACAGCAAGTGTGTTTTCAGACAGACATCTCCGGAGGCTC 931  
Db 181 TAATAAGATGATGTTTCAACACAGCAAGTGTGTTTTCAGACAGACATCTCCGGAGGCTC 240  
QY 932 ATTGTGGCTTGTGATGTCCTCCAAATGCTCCATACCTGATCTCTCCACCTGGCCAAAT 991  
Db 241 ATTGTGGCTTGTGATGTCCTCCAAATGCTCCATACCTGATCTCTCCACCTGGCCAAAT 300  
QY 992 CACCGACCTGAAGGGGAAATTCAGGGGGGAGCTCATATATGCACTGTGAGAGCTCC 1051  
Db 301 CACCGACCTGAAGGGGAAATTCAGGGGGGAGCTCATATATGCACTGTGAGAGCTCC 360  
QY 1052 TGGGATGATTTATGACATGAGAAAGCTCACAAGTATATCATTCGATAAGTAAAGTAT 1111  
Db 361 TGGGATGATTTATGACATGAGAAAGCTCACAAGTATATCATTCGATAAGTAAAGTAT 420  
QY 1112 TCTGATCTCAGACAGCAAGTGAATCTCTTCAAGTAACTACTGCTCTCATCC 1171  
Db 421 TCTGATCTCAGACAGCAAGTGAATCTCTTCAAGTAACTACTGCTCTCATCC 480  
QY 1172 AAGGAGGCAAGCTGAGGAGTCTTTTGTAAACCAAAACATTAATCTTTGAAA 1231  
Db 481 AAGGAGGCAAGCTGAGGAGTCTTTTGTAAACCAAAACATTAATCTTTGAAA 540  
QY 1232 TGGCAGAGATCTTTTCAATGCTATTCAGGCTGTGTAAGTGTGATCTGAAATCAGAAAT 1291  
Db 541 TGGCAGAGATCTTTTCAATGCTATTCAGGCTGTGTAAGTGTGATCTGAAATCAGAAAT 600  
QY 1292 ATCCAACTTGGCAGAGATATCTTTGTTATTCCTCCACAGACTCCGCGAGAGACACTAG 1351  
Db 601 ATCCAACTTGGCAGAGATATCTTTGTTATTCCTCCACAGACTCCGCGAGAGACACTAG 660

QY 872 TAATAAGATGATGATTTCAACACAGCAAGAACTGTCTTTCACAGACAACAACTCCGGGAGGCTC 931

Db 181 TAATAAGATGATGATTTCAACACAGCAAGAACTGTCTTTCACAGACAACAACTCCGGGAGGCTC 240

QY 932 ATTGTGGCTTTGATGTCCCAAAATGCTCCATACCTGATCTCTTCCACCTGGCCAAAT 991

Db 241 ATTGTGGCTTTGATGTCCCAAAATGCTCCATACCTGATCTCTTCCACCTGGCCAAAT 300

QY 992 CACCCAGCTGAAAGCGGAAATTCACGGGGGAGCTGTCAATTAATCTGACTTGGACAGCTCC 1051

Db 301 CACCCAGCTGAAAGCGGAAATTCACGGGGGAGCTGTCAATTAATCTGACTTGGACAGCTCC 360

QY 1052 TGGGGATGATTTAGACCATGGAACACCTCCACAAGTATATCATTCGAATAGTCAAGTAT 1111

Db 361 TGGGGATGATTTAGACCATGGAACACCTCCACAAGTATATCATTCGAATAGTCAAGTAT 420

QY 1112 TCTGTATCTCAGAGACAACTTCATGAATATCTCTTCAAGTGAATATCTACTGCTCATCC 1171

Db 421 TCTGTATCTCAGAGACAACTTCATGAATATCTCTTCAAGTGAATATCTACTGCTCATCC 480

QY 1172 AAAGGAGCAACTCTGAGAGAGTCTTTTGTTTAAACAGAAACATTACTTTGAAAA 1231

Db 481 AAAGGAGCAACTCTGAGAGAGTCTTTTGTTTAAACAGAAACATTACTTTGAAAA 540

QY 1232 TGGCACAATCTTTTCATATGCTATTCAGGCTGTGTAAGTGCGATCTGAAATCAGAAAT 1291

Db 541 TGGCACAATCTTTTCATATGCTATTCAGGCTGTGTAAGTGCGATCTGAAATCAGAAAT 600

QY 1292 ATCCAAACATTCGACAGAGTATCTTTGTTTATTCCTCCACAGACTCCGCCAGAGACACTAG 1351

Db 601 ATCCAAACATTCGACAGAGTATCTTTGTTTATTCCTCCACAGACTCCGCCAGAGACACTAG 660

QY 1352 TCTTGATGAACGTCTGCTCCTTGT - CCTAATATTTATATCAACAGACACCATTTCTGGCA 1410

Db 661 TCTTGATGAACGTCTGCTCCTTGTGCCCTTAATATTCATATCAACACACCATTCCTGGCA 720

QY 1411 TTCACATTTTAAAAATTTATGTGAAGTGAATGAGAGACTCGACGCTGCAATAGCCTAG 1470

Db 721 TTCACATTTTAAAAATTTATGTGAAGTGAATGAGAGACTCGACGCTGCAATAGNCTAG 780

QY 1471 GCTGAATTTTGTCAGATTAATTAATAATCAATTCATCCTTTTTTGTATTATATAAA 1528

Db 781 GCTGAATTTTGTGTGGGTGAAT - AATAATATTAATTCANCCCTTTTTTGTATTATATAAA 837

RESULT 5

US-09-193-562D-1

; Sequence 1, Application US/09193562D

; Patent No. 6309857

; GENERAL INFORMATION:

; APPLICANT: Pauli, Benedict U.

; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium

; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules

; FILE REFERENCE: 18617.0052

; CURRENT APPLICATION NUMBER: US/09/193.562D

; CURRENT FILING DATE: 1998-11-17

; PRIOR APPLICATION NUMBER: US/60/065.922

; PRIOR FILING DATE: 1997-11-17

; NUMBER OF SEQ ID NOS: 47

; SEQ ID NO 1

; LENGTH: 3317

; TYPE: DNA

; ORGANISM: Unknown

FEATURE:

; OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated

; OTHER INFORMATION: protein from bovine endothelial cells

US-09-193-562D-1

Query Match 24.6%; Score 414.4; DB 4; Length 3317;

Best Local Similarity 59.6%; Pred. No. 1e-115;

Matches 804; Conservative 0; Mismatches 516; Indels 30; Gaps 5



Oy 1 AACAAAGTGGTCCATCATCCACAGTCCGCTTTGGGGCCCTCTCAGCTCAAGACTAG 60  
 Db 1351 AACGAGTGGTCCATCATCCACAGTCCGCTTTGGGGCCCTCTCAGCTCAAGACTAG 1410  
 Oy 61 AGGAGCTGTCAAATGACAGAGGTTTACAGACATATGCTTCAGATCAAGTTCAGACA 120  
 Db 1411 AGACATTTGCAAAATGACAGAGGATATC-----GTTTTTTTCCAAATAAGCATMA 1464  
 Oy 121 ATGGCTCATGATGCTTTTGGGGCCCTTTCATCAGAAAGTCTGCTCAGCGCT 180  
 Db 1465 CTGGCTCATGATGCTTTTGGGGCCCTTTCATCAGAAAGTCTGCTCAGCGCT 1524  
 Oy 181 CCATCCAGCTTGAAGTGAAGGATTAACCTCCAGAACAGCCAGTGAATGGCACAG 240  
 Db 1525 CTATTCAGTGGAAAGCAAGCCTTGAAATATACAGAAAGAAAGATTAAGGCGACAG 1584  
 Oy 241 TGATGCTGACAGCACCGTGGGAAAGACCTTTGTTCTTATCAGCTGACACAGCAGC 300  
 Db 1585 TGCTGCTGACAGCTAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGA 1644  
 Oy 301 CTCCCAATCTCTCTGAGATCCAGTGGACAGAGA-----AGGTGGCTTTG 351  
 Db 1645 AACCGAAATTTCTCTCCAGATCCAAAGAAAGAAATATATAAACCCTCGGATTTCAAG 1704  
 Oy 352 TAGTGACAAAAAACAATAATGCTTACCTCCAAATCCAGGACATTTGCTAAGTTGCA 411  
 Db 1705 AAGATTAAGTAAATTTGATGCTGCTGCTCAATAATACCTGATTTGAGAGACAGTA 1764  
 Oy 412 CTGGCAATACAGTCTG-----AAGCAAGCTCACAAACCTTGACCTGACTGTCA 462  
 Db 1765 CTGGCAATACAGTCTG-----AAGCAAGCTCACAAACCTTGACCTGACTGTCA 1824  
 Oy 463 CGTCCGCGCTGCAATGCTACCTGCTCCAAATACAGTGAAGTGAAGTGAAGTGAAG 522  
 Db 1825 CCAGCTGAGCAAGAGTCTCTACTATACCCAGTAAATGCAACACCTCAGTCAAGTCAAC 1884  
 Oy 523 ACACCAAGAAATTTCCCAAGCCCTGCTGATTTATGCAAAATTTGCGCAAGAGCTCCC 582  
 Db 1885 ATACAGCAATTTATCTGATCCCAATGATTTGTTATGCAAAATTTGCGCAAGAGCTCCC 1944  
 Oy 583 CAATTTCTAGGGCAGTGTACAGCCCTGATTTGAATCAGTGAATGGAAGTGAAGTGAAG 642  
 Db 1945 CTGATCTGGAATCAGTGAATGATGATTAATGAAACCAAGATGATGATCAAGTAAAT 2004  
 Oy 643 TGGAACTACTGATTAATGAGAGAGTGTGATGCTACTAATGATTAAGCTGTCTCTCA 702  
 Db 2005 TGGAACTACTGATTAATGAGAGAGTGTGATGCTACTAATGATTAAGCTGTCTCTCA 2064  
 Oy 703 GGTATTTCAACAATTAATGACAGATGATGATGATGATGATGATGATGATGATGATG 762  
 Db 2065 GATTAATTTACAGATTAATGATGATGATGATGATGATGATGATGATGATGATGATG 2124  
 Oy 763 GAGTTAAGCAGCAGAGGAGGATGATGATGATGATGATGATGATGATGATGATGATG 822  
 Db 2125 GAAACAAACAGGCTAGGCTAAATTTAAGACACACAGAAACAAAGTTCTATATGTTCCAG 2184  
 Oy 823 GCTGATTTGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 882  
 Db 2185 GCTGATTTGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2244  
 Oy 883 ATGTTCAACACAGAGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATG 942  
 Db 2245 TGGCAAAAGCTAAATTAAGAGCTTTAGCAGACTTAACCTCTGAGAGGCTATTTACTGAT 2304  
 Oy 943 CTGATGCTCCCAATGCTCCCA--TACCTGATCTCTCCCACTGAGCAATCACGAGC 999  
 Db 2305 CAGGAGCT 2364  
 Oy 1000 TGAAGGCGGAATTTACAGGCGGAGCTCTCATTAATCTGATTTGAGAGAGTCTCTGGGATG 1059  
 Db 2365 TTGAGGCTAGATTTCAAGAG--ATTATATTTCACTTTCAAGAGAGGCTCTGGCAATG 2421  
 Oy 1060 ATTATGACATGAGACAGCTCAAGTATATCATTCGAATAAGTATTAATTTCTGATC 1119

Db 2422 TCCATGATTAAGGAAAGCAACAGCTACATTAATGATTAAGTAAAGTATTCATGATC 2481  
 Oy 1120 TCAGAGACAGTTCATGATTAATCTCTCAAGTGAATACATCTCTCTCTCTCTCTCTCT 1179  
 Db 2482 GTCAAGAGATTTTACATGATGAGCTTATGATTAATGATTAATGATTAATGATTAAT 2541  
 Oy 1180 CCACTGAGAGAGTCTTTTGTGTTTAAACGAAATACATTTCTTTGAAATGAGCAG 1239  
 Db 2542 CCGATCAAAAGAAATTTTGAATTTAAAGCCGAAATTTTGAATGATTAATGATTAATG 2601  
 Oy 1240 ATCTTTCAATGCTATTCAGGCTGTTGATTAAGTGAATGATTAATGATTAATGATTAAT 1299  
 Db 2602 AATCTATATTTCACTCCAGGATCAAGGATCAAGGATCAAGGATCAAGGATCAAGGATCA 2661  
 Oy 1300 TTGACAGATTAATTTGTTTATCTCTCAC 1329  
 Db 2662 TTGATCAAGCAATCAAAATTAATCTCTCAC 2691

RESULT 6  
 US-09-193-562D-33  
 ; Sequence 33, Application US/09193562D  
 ; Patent No. 6309857  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Pauli, Benedict U.  
 ; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 ; FILE REFERENCE: 18617.0052  
 ; CURRENT APPLICATION NUMBER: US/09/193.562D  
 ; PRIOR FILING DATE: 1998-11-17  
 ; PRIOR APPLICATION NUMBER: US/60/065.922  
 ; NUMBER OF SEQ ID NOS: 47  
 ; SEQ ID NO 33  
 ; LENGTH: 3022  
 ; TYPE: DNA  
 ; ORGANISM: Mus musculus  
 US-09-193-562D-33

Query Match 23.7%; Score 398.8; DB 4; Length 3022;  
 Best Local Similarity 59.4%; Pred. No. 5.3e-111;  
 Matches 796; Conservative 0; Mismatches 517; Indels 27; Gaps 6;

Oy 6 ACTGTCGCATATATCCACAGCTGCTTTGGGGCCCTCTGCACTCAAGAACTAAGAGAG 65  
 Db 1308 AGCGGTGCATCATATCCACAGCTGCTTTGGGGCCCTCTGCACTCAAGAACTAAGAGAG 1367  
 Oy 66 CTGTCCAAATGACAGAGGTTTACAGACATATGCTTCAGATCAAGTTCAGAACTAAGAG 125  
 Db 1368 CTGTGAGACATGACAGAGGCTTTGTTTCTATGCAACAAAGACT-----AATCAGC 1421  
 Oy 126 CTGATGATGCTTTTGGGGCCCTTTCATCAGAAATGAGAGTGTCTCAGAGGCTCATC 185  
 Db 1422 CTATTCGATGCTTTTACAGATTAATTTCAATCTCAAGTGGAGAGGCTCTCCAGAGGCTCTG 1481  
 Oy 186 CAGCTTGAAGATTAAGGATTAACCTCCAGAAACAGCCAGTGAATTAATGAGCAGTGAATC 245  
 Db 1482 CAGTTGGAGAGCAAGCCCTTGATGTCAGAGAGGAGGATTAATGAGTAAAGTAACTACT 1541  
 Oy 246 GTGAGACAGCAGTGGGAAAGACACTTGTTCATCAGTGAAGCAAGCAGGCTCC 305  
 Db 1542 CTGAGACAGTACGCTGGCAGACAGCAGTCTTTTGTATCAGCTGATGATGATTAAGAGCA 1601  
 Oy 306 CAATTCCTCTCTGAGATCCAGTGGACAGAGCA-----AGGTGGCTTTGATGAG 356  
 Db 1602 GAATATCATTTCTCAAGATCCAAAGAAATTAATTAACCTCAGATTCAGATTCAGATAT 1661  
 Oy 357 GACAAAAACACCAAAATGAGCTACTCTCAATCCAGGATTTGCTAAGTGGAGCTGG 416  
 Db 1662 AAATTAACATCCGCTGCTGATGATTAATTAATTAATTAATTAATTAATTAATTAATTA 1721  
 Oy 417 AAATACAG--TCTGCAAGCAAGTCAACAAACCTTGAGCTGATGATGATGATGATGATG 473

```

Db 1722 ACTTACAGTACACGGGTACAGTCTCAGTTGATTACATGACATGACACTGAGCA 1781
Oy 474 TCCATGCTACCTGCTCCCAATTACAGTACTCCAAAACGACAGACACCAAA 533
Db 1782 AGAAGTCCACCATGAGACACTCTGGGCTACTGCTACATGAGTCAGACAGCCAG 1841
Oy 534 TCCCCAGCCCTCTGCTAGTTTATGCAAAATATCCGCAAGGAGCCCTCCCAATCTCAG 593
Db 1842 TACCTGAGCCGAGTATGTTGTCAGCGGCTAGCCAGAGATTTTTCCTGTTGCGGA 1901
Oy 594 GCCAGTGTACAGCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 653
Db 1902 GCCAATGTACAGCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1961
Oy 654 GATATGAGCAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 713
Db 1962 GACAAATGGGCGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATG 2021
Oy 714 ACTATGACAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 773
Db 2022 GATTTATCATGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2081
Oy 774 GCCAGAGGAGTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 833
Db 2082 ACCAGACTGAGCTTAAAG---CAGAGAAACAGCTTATATATACCTGCTGATGGA 2138
Oy 834 AATGATGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 893
Db 2139 AATGATGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2198
Oy 894 AAGCAAGTGTGTTTACAGACAGATGATGATGATGATGATGATGATGATGATGATGATGATG 950
Db 2199 ACAGTGAAGACTTACAGACAGATGATGATGATGATGATGATGATGATGATGATGATGATG 2258
Oy 951 CCAATGCTCCCATACCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1010
Db 2259 CTTGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2318
Oy 1011 ATTGAGGGGGGAGTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1070
Db 2319 TTTTATGAGTG---ATTATATTCACCTTACATGAGAGGCGCCCTGCAAGTTCGCAAT 2375
Oy 1071 GGAACAGCTCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1130
Db 2376 GGAAGACAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2435
Oy 1131 TTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1190
Db 2436 TTTTAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2495
Oy 1191 GAACTCTTTTGTGTTAAACGAAATGATGATGATGATGATGATGATGATGATGATGATGATG 1250
Db 2496 GAACTCTTTTGTGTTAAACGAAATGATGATGATGATGATGATGATGATGATGATGATGATG 2555
Oy 1251 GCTATGAGGCTGTGTTAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1310
Db 2556 GCAATTCAGGAGAGACAAATGAAAGGCTACCTGAGGCTCCACATGCGACAGGCT 2615
Oy 1311 TCTTTGTTTATCTCCACA 1330
Db 2616 GTCAAGCTTACTCTCTAGA 2635

```

```

RESULT 7
US-09-193-562D-29
; Sequence 29, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617.0052

```

```

; CURRENT APPLICATION NUMBER: US/09/193, 562D
; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065, 922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 29
; LENGTH: 3418
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-193-562D-29

```

```

Query Match 21.9%; Score 368.2; DB 4; Length 3418;
Best Local Similarity 59.1%; Pred. No. 1,1e-101;
Matches 735; Conservative 0; Mismatches 478; Indels 30; Gaps 5;

```

```

Oy 115 AGAACAATGGCCCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 174
Db 1469 ACATTAATGGCTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1528
Oy 175 AGCGCTCATCCAGCTTGAAGTAAAGGATTAACCTCCAGACAGCCAGTGAATG 234
Db 1529 AGAGGCTCTTCAAGTTGAAGTAAACCTTGAATATCCAGCAAGAAATGATTAATG 1588
Oy 235 GCAAGTATCTGACACAGCAGGAGGAAAGACACTTCTTCTTATCACTGAGCA 294
Db 1589 GTACAGTGTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1648
Oy 295 CGAGCCTCCCAATCTCTCTGAGTCCAGTCCAGTCCAGTCCAGTCCAGTCCAGTCCAGTCCAGTCC 345
Db 1649 TACAAAGCAGCAATATTTCTTCAAGATCCAAAGGAAAGAAATATCTACTCAGAT 1708
Oy 346 GCTTGTAGTGAACAAAACACCAAAATGGCTACCTCCAAATCCAGCATTGCTAAG 405
Db 1709 TTTCAAGAGTGAATTAATATTCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1768
Oy 406 TTGGCACTGGAATACATGCTGCAAG-----CAAGCTCACAACCTTGACCTGA 456
Db 1769 CAGGCACTTGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1828
Oy 457 CTGTACGTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 516
Db 1829 CANTGACACTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1888
Oy 517 ACAAGACACACCAATTTCCAGCCCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 576
Db 1889 GTCAAAATACAGTCTATTCCTTACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1948
Oy 577 CTTCCCAATTTCTCAGGGCAGTGTACAGCCCTGATGATGATGATGATGATGATGATGATGATGATGATG 636
Db 1949 TTTCTGCTGTTGGGAATCAATGTAACGCCATTTATGAAATGAAAGGGAGATCAG 2008
Oy 637 TTTACCTTGAATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 696
Db 2009 TATCATTTGAGCTCTGAGCAATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2068
Oy 697 ACTCAAGTATTTCAACACTTATGACACGAATGATGATGATGATGATGATGATGATGATGATGATGATG 756
Db 2069 ACTCAAGTATTTTCAACACTTATGACACGAATGATGATGATGATGATGATGATGATGATGATGATGATG 2128
Oy 757 TGGGAGAGTTAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 816
Db 2129 AGCGAAGAAAACAGAGTAGC-----TAGTCAACACAGAAATTAAGCTCTGTAG 2182
Oy 817 TACCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 876
Db 2183 TACCGGCTATGCTGGAATGAAATGAAATTTACTGAACCATCAACCTGAAGTCAAG 2242
Oy 877 AGATGATGTTCAACACAGCAAGTGTCTTCAACGAGACATCTTGGAGGCTCTTTG 936
Db 2243 ATGATGTGAAGAGAGCTCAACAGAGACTTCAAGAGACTTCAAGAGGCTGCTTTGA 2302
Oy 937 TGGCTTGTGATG---CCCAATGCTCCATTACTGATCTCTCCACCTGGGCAATCA 993

```

```

; GENERAL INFORMATION:
; APPLICANT: ENDSGE, WILLSON O., ET AL.
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
; TITLE OF INVENTION: PRODUCTS: 11
; FILE REFERENCE: CCDNA-260XX
; CURRENT APPLICATION NUMBER: US/09/385,982

```





[illegible]

100

1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28  
 29  
 30  
 31  
 32  
 33  
 34  
 35  
 36  
 37  
 38  
 39  
 40  
 41  
 42  
 43  
 44  
 45  
 46  
 47  
 48  
 49  
 50  
 51  
 52  
 53  
 54  
 55  
 56  
 57  
 58  
 59  
 60  
 61  
 62  
 63  
 64  
 65  
 66  
 67  
 68  
 69  
 70  
 71  
 72  
 73  
 74  
 75  
 76  
 77  
 78  
 79  
 80  
 81  
 82  
 83  
 84  
 85  
 86  
 87  
 88  
 89  
 90  
 91  
 92  
 93  
 94  
 95  
 96  
 97  
 98  
 99  
 100  
 101  
 102  
 103  
 104  
 105  
 106  
 107  
 108  
 109  
 110  
 111  
 112  
 113  
 114  
 115  
 116  
 117  
 118  
 119  
 120  
 121  
 122  
 123  
 124  
 125  
 126  
 127  
 128  
 129  
 130  
 131  
 132  
 133  
 134  
 135  
 136  
 137  
 138  
 139  
 140  
 141  
 142  
 143  
 144  
 145  
 146  
 147  
 148  
 149  
 150  
 151  
 152  
 153  
 154  
 155  
 156  
 157  
 158  
 159  
 160  
 161  
 162  
 163  
 164  
 165  
 166  
 167  
 168  
 169  
 170  
 171  
 172  
 173  
 174  
 175  
 176  
 177  
 178  
 179  
 180  
 181  
 182  
 183  
 184  
 185  
 186  
 187  
 188  
 189  
 190  
 191  
 192  
 193  
 194  
 195  
 196  
 197  
 198  
 199  
 200  
 201  
 202  
 203  
 204  
 205  
 206  
 207  
 208  
 209  
 210  
 211  
 212  
 213  
 214  
 215  
 216  
 217  
 218  
 219  
 220  
 221  
 222  
 223  
 224  
 225  
 226  
 227  
 228  
 229  
 230  
 231  
 232  
 233  
 234  
 235  
 236  
 237  
 238  
 239  
 240  
 241  
 242  
 243  
 244  
 245  
 246  
 247  
 248  
 249  
 250  
 251  
 252  
 253  
 254  
 255  
 256  
 257  
 258  
 259  
 260  
 261  
 262  
 263  
 264  
 265  
 266  
 267  
 268  
 269  
 270  
 271  
 272  
 273  
 274  
 275  
 276  
 277  
 278  
 279  
 280  
 281  
 282  
 283  
 284  
 285  
 286  
 287  
 288  
 289  
 290  
 291  
 292  
 293  
 294  
 295  
 296  
 297  
 298  
 299  
 300  
 301  
 302  
 303  
 304  
 305  
 306  
 307  
 308  
 309  
 310  
 311  
 312  
 313  
 314  
 315  
 316  
 317  
 318  
 319  
 320  
 321  
 322  
 323  
 324  
 325  
 326  
 327  
 328  
 329  
 330  
 331  
 332  
 333  
 334  
 335  
 336  
 337  
 338  
 339  
 340  
 341  
 342  
 343  
 344  
 345  
 346  
 347  
 348  
 349  
 350  
 351  
 352  
 353  
 354  
 355  
 356  
 357  
 358  
 359  
 360  
 361  
 362  
 363  
 364  
 365  
 366  
 367  
 368  
 369  
 370  
 371  
 372  
 373  
 374  
 375  
 376  
 377  
 378  
 379  
 380  
 381  
 382  
 383  
 384  
 385  
 386  
 387  
 388  
 389  
 390  
 391  
 392  
 393  
 394  
 395  
 396  
 397  
 398  
 399  
 400  
 401  
 402  
 403  
 404  
 405  
 406  
 407  
 408  
 409  
 410  
 411  
 412  
 413  
 414  
 415  
 416  
 417  
 418  
 419  
 420  
 421  
 422  
 423  
 424  
 425  
 426  
 427  
 428  
 429  
 430  
 431  
 432  
 433  
 434  
 435  
 436  
 437  
 438  
 439  
 440  
 441  
 442  
 443  
 444  
 445  
 446  
 447  
 448  
 449  
 450  
 451  
 452  
 453  
 454  
 455  
 456  
 457  
 458  
 459  
 460  
 461  
 462  
 463  
 464  
 465  
 466  
 467  
 468  
 469  
 470  
 471  
 472  
 473  
 474  
 475  
 476  
 477  
 478  
 479  
 480  
 481  
 482  
 483  
 484  
 485  
 486  
 487  
 488  
 489  
 490  
 491  
 492  
 493  
 494  
 495  
 496  
 497  
 498  
 499  
 500  
 501  
 502  
 503  
 504  
 505  
 506  
 507  
 508  
 509  
 510  
 511  
 512  
 513  
 514  
 515  
 516  
 517  
 518  
 519  
 520  
 521  
 522  
 523  
 524  
 525



***This Page Blank (uspto)***



GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 7.20096 Seconds  
(without alignments)  
11417.439 Million cell updates/sec

Title: US-09-049-696-19  
Perfect score: 3040  
Sequence: 1 AACCAAGTGTGTCATCATC.....AATGCTAACAACACTGGGTA 1683

Scoring table:  
BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 231628 segs, 24425594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+np,model;-DEV=xlh  
-O=/cgn2.1/USPTO.spool/US09049696/unnat\_16102002\_115821\_24739/app\_query.fasta\_1.13694  
-DB=Issued\_Patents\_AA-QEWT-fastan-SUFFIX=rai-MINMATCH=0.1-LOOPCL=0  
-LOOPEXT=0-UNITS=bits-START=1-END=-1-MATRIX=bl0sum62-TRANS=human40.cdl  
-LIST=45-DOCCALIGN=200-THR.SCORE=pct-THR.MAX=100-THR.MIN=0-ALIGN=15  
-MODE=LOCAL-OUTPMT=ptc-NORM=ext-HEAPSIZE=500-MINLEN=0-MAXLEN=200000000  
-USER=US09049696\_ECGN\_1.1\_57\_etunat\_16102002\_115821\_24739-NCPU=6-ICPU=3  
-NO\_XLPTX-NO\_MMAP-LARGEQUERY-NEG\_SCORES=0-WAIT-LOGLOG-DEV.TIMEOUT=120  
-WARN.TIMEOUT=30-THREADS=1-XGAPOP=10-XGAPEXT=0.5-FGAPOP=6-FGAPEXT=7  
-YGAPOP=10-YGAPEXT=0.5-DELOP=6-DELEXT=7

Database :

- 1: Issued Patents\_AA:\*
- 2: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*
- 3: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*
- 4: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*
- 5: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*
- 6: /cgn2\_6/ptodata/2/1aa/Backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	2518	82.8	914	4	US-09-193-562D-28
2	1203	39.6	228	1	US-08-469-667-9
3	1203	39.6	228	4	US-09-224-110-9
4	1203	39.6	228	5	PCT-US95-07289-9
5	1198	39.4	903	4	US-09-193-562D-46
6	1106	36.4	905	4	US-09-193-562D-2
7	1095	36.0	902	4	US-09-193-562D-34
8	1069	35.2	1000	4	US-09-193-562D-30
9	987.5	32.5	793	4	US-09-193-562D-32
10	903	29.7	821	4	US-09-193-562D-11
11	903	29.7	821	4	US-09-193-562D-12
12	408	13.4	203	4	US-09-193-562D-3

13	117.5	3.9	1848	4	US-08-296-791-6	Sequence 6, Appl1
14	117.5	3.9	1848	5	PCT-US95-10661A-6	Sequence 6, Appl1
15	115	3.8	1447	4	US-09-041-886-25	Sequence 25, Appl1
16	115	3.8	1447	5	PCT-US94-05277-2	Sequence 2, Appl1
17	111	3.7	637	1	US-08-235-838-16	Sequence 16, Appl1
18	111	3.7	637	2	US-08-465-473B-16	Sequence 16, Appl1
19	111	3.7	1395	4	US-09-540-245A-15	Sequence 15, Appl1
20	109	3.6	1529	2	US-08-728-470-10	Sequence 10, Appl1
21	109	3.6	1529	4	US-08-719-641-10	Sequence 10, Appl1
22	107.5	3.5	934	4	US-08-840-466A-19	Sequence 19, Appl1
23	107.5	3.5	1094	4	US-09-268-347-32	Sequence 32, Appl1
24	107	3.5	1600	2	US-08-617-697-10	Sequence 10, Appl1
25	106.5	3.5	966	1	US-08-571-758-2	Sequence 2, Appl1
26	106.5	3.5	966	1	US-08-909-984A-2	Sequence 2, Appl1
27	106.5	3.5	966	1	US-08-909-983-2	Sequence 2, Appl1
28	106	3.5	1651	4	US-09-540-245A-18	Sequence 18, Appl1
29	105.5	3.5	1702	4	US-08-296-791-5	Sequence 5, Appl1
30	105.5	3.5	1702	5	PCT-US95-10661A-5	Sequence 5, Appl1
31	104	3.4	424	5	PCT-US95-03866-12	Sequence 12, Appl1
32	104	3.4	424	5	PCT-US95-03866-14	Sequence 14, Appl1
33	104	3.4	1464	4	US-08-891-640-2	Sequence 2, Appl1
34	103	3.4	241	1	US-08-235-838-11	Sequence 11, Appl1
35	103	3.4	241	2	US-08-465-473B-11	Sequence 11, Appl1
36	102	3.4	678	5	PCT-US93-03027-3	Sequence 3, Appl1
37	102	3.4	878	1	US-08-732-429-2	Sequence 2, Appl1
38	102	3.4	878	4	US-08-237-919-2	Sequence 2, Appl1
39	102	3.4	878	5	PCT-US95-05518-2	Sequence 2, Appl1
40	101	3.3	498	3	US-09-045-632-30	Sequence 30, Appl1
41	101	3.3	541	3	US-09-045-632-36	Sequence 36, Appl1
42	101	3.3	599	3	US-09-045-632-28	Sequence 28, Appl1
43	101	3.3	642	3	US-09-045-632-35	Sequence 35, Appl1
44	101	3.3	818	3	US-09-045-632-25	Sequence 25, Appl1
45	101	3.3	861	3	US-09-045-632-34	Sequence 34, Appl1

#### ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
; Sequence 28, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FIDE REFERENCE: 18617\_0052  
; CURRENT FILING DATE: US/09/193\_562D  
; PRIOR APPLICATION NUMBER: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065\_922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 28  
; LENGTH: 914  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-28  
  
Alignment Scores:  
Pred. No.: 4.22e-240 Length: 914  
Score: 2518.00 Matches: 487  
Percent Similarity: 100.00% Conservative: 1  
Best Local Similarity: 99.80% Mismatches: 0  
Query Match: 82.83% Indels: 0  
DB: 4 Gaps: 0  
US-09-049-696-19 (1-1683) x US-09-193-562D-28 (1-914)  
QY 3 CAAATGTCATCATATGCACACATGCTTGGGCGCTCGACGTCAGAACTAGAG 62  
DB 427 GATGCTGTCATCATATGCACACATGCTTGGGCGCTCGACGTCAGAACTAGAG 62  
QY 63 GAGCTGTCATCATATGCACACATGCTTGGGCGCTCGACGTCAGAACTAGAG 62

Db 447 GluLeuSerIysMetThrGlyGlyLeuGlnThrTyAlaSerAspGlnValGlnAsnAsn 466  
 QY 123 GGGCTATTTATGCTTTTGGGGCCCTTTCATCCAGAAATGGAGCTGCTCTCCAGCGCTCC 182  
 Db 467 GlyLeuLeuAspIlePheGlyAlaLeuSerSerGlyAsnGlyAlaValSerGlnAsnSer 486  
 QY 183 ATCCAGCTTGAAGTAAAGGATTACCCCTCCAGAACAGCCAGTGAATGGCACAGT 242  
 Db 487 IleGlnLeuLeuSerIysGlyLeuThrLeuGlnAsnSerIleThrMetAsnGlyThrVal 506  
 QY 243 ATCTGGACAGACACCGTGGAGAAAGACACTTGTCTTATCCACTGGACACGACGCT 302  
 Db 507 IleValAspSerThrValGlyLysAspThrLeuPheLeuIleThrTrpThrGlnPro 526  
 QY 303 CCCCAGATCTCTCTGGAGTCCAGTCCAGACAGACAGTGGCTTGTAGTGGACAA 362  
 Db 527 ProGlnIleLeuLeuTrpAspProSerGlyGlnLysGlnGlyGlyPheValValAspLys 546  
 QY 363 AACACCAAAATGGCTACCTCCAAATCCAGGCAATGCTTAAGTTGGACACTTGGAAATAC 422  
 Db 547 AsnThrIysMetAlaTyAlaGlnIleProGlyIleAlaLysValGlyThrTrpLysTyr 566  
 QY 423 AGCTGCAACAGACCTCACAACCTTGACCTGCTCACGTCGCCGCTCCATGCT 482  
 Db 567 SerLeuGlnAlaSerSerGlnThrLeuThrValThrSerArgAlaSerAsnAla 586  
 QY 483 ACCCTGCTCCAAATTACAGTACTCCAAACGAAACAGACACCAATTCACCAATTCGCCAGC 542  
 Db 587 ThrLeuProIleThrValThrSerLysThrAsnLysAspThrSerLysPheProSer 606  
 QY 543 CTTCTGCTAGTTATGCAAAATATTCGCCAAGAGACCCGCCAATTCACAGGCGCAGTGC 602  
 Db 607 ProLeuValValTyAlaAsnIleArgGlnGlyLaserProIleLeuArgAlaSerVal 626  
 QY 603 ACAGCCCTGATGTAATGAGTGAATGAAAAACAGTACCTTGACACTACAGTGAATAGA 662  
 Db 627 ThrAlaLeuIleGlyLeuSerValAsnGlyLysThrValThrLeuGlnLeuLeuAspAsnGly 646  
 QY 663 GCAGGTGCTAGTACTTAAGGATGACGGTGTACTCAAGGTATTCACAACTTAATGAC 722  
 Db 647 AlaGlyAlaAspAlaThrLysAspAspGlyValTySerArgTyrrPheThrThrAsp 666  
 QY 723 ACGAATGTGATATCACTGTAAAGTGGGAGCTCTGGAGAGAGTTAAAGCAGCCAGAGG 782  
 Db 667 ThrAsnGlyArgTyrrSerValLysValArgAlaLeuGlyGlyValAlaAlaIleArgArg 686  
 QY 783 AGAGTGATACCCGACAGTGGAGCTGATACCTGATCTGCTGATGTAATGAGTGAATAGA 842  
 Db 687 ArgValIleProGlnGlnSerGlyAlaLeuTyrrIleProGlyTyrrIleGlnAsnAspGln 706  
 QY 843 ATCAATGGAATCCACCAAGACCTGAAATTAATAGATGATGTTCAACACCAAGCAAGT 902  
 Db 707 IleGlnTrpAsnProProAlaGProGlnIleAsnLysAspValGlnHisLysGlnVal 726  
 QY 903 TGTTCAGCAGAACATCTCTGGAGGCTCATTTGTGCTTGTGATGTCCTCCAAATGCTCC 962  
 Db 727 CysPheSerArgThrSerSerGlyLysPheValAlaSerAspValProAsnAlaPro 746  
 QY 963 ATACCTGATCTCTCCACCTGGCCAAATCACCACTGAAGGGGAAATTCAGGGGGC 1022  
 Db 747 IleProAspLeuPheProProGlyGlnIleThrAspLeuLysAlaGlnIleHisGlyGly 766  
 QY 1023 AGTCTCAATTAATGACTTGACAGCTCTGGGATGATTATGACCAATGCAAGCTCAC 1082  
 Db 767 SerLeuLeuAsnLeuThrTrpThrAlaProGlyLysAspArgLysGlyThrAlaHis 786  
 QY 1083 AAGTATATCATTCGAATTAAGTAAAGTATCTGATCTCAGAGACCAATTCATGAATCT 1142  
 Db 787 LysTyrrIleIleArgIleSerThrSerIleLeuAspLeuArgAspLysPheAsnGlnLys 806  
 QY 1143 CTTCAAGTGAATACTACTGCTCTATCCCAAGAGACCAACTGTGAGGAAGTCTTTTG 1202  
 Db 807 LeuGlnValAsnThrThrAlaLeuIleProLysGlnLysAlaAsnSerGlnGlnValPheLeu 826

QY 1203 TTTAAACGAGAAACATTAATCTTTGAAATGCGACAGATCTTTTCATTCCTATTCAGGCT 1262  
 Db 827 PheLysProGlnAsnIleThrPheGlnAsnGlyThrAspLeuPheIleAlaIleGlnAla 846  
 QY 1263 GTTGATTAAGTGTGATCTGAAATCAGAAATATCCACATTCGACAGCATATCTTTGTTAT 1322  
 Db 847 ValAspLysValAspLeuLysSerGlnIleSerAsnIleAlaArgValSerLeuPheIle 866  
 QY 1323 CTTCCACAGCTCCGCGCAGACACCTAGCTCCGATGAAACGTCGCTCTGCTCAAT 1382  
 Db 867 ProProGlnThrProProGlnThrProSerProAspGlnThrSerAlaProCysProAsn 886  
 QY 1383 ATTCATATCAACAGACACCATCTCTGCAATTCACATTTTAAATTAATGGAAGTGAGATA 1442  
 Db 887 IleHisLysSerThrIleProGlyIleHisLysLeuLysIleMetTrpLysTrpIle 906  
 QY 1443 GGAGAACTGCAAGCTGTCAATAGCC 1466  
 Db 907 GlyGlnLeuGlnLeuSerIleAla 914  
 RESULT 2  
 US-08-469-667-9  
 ; Sequence 9, Application US/08469667  
 ; Patent No. 5733748  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Yu, Guo-Liang  
 ; TITLE OF INVENTION: Colon Specific Genes and Proteins  
 ; NUMBER OF SEQUENCES: 24  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Carella, Byrne, Bain, Giffillan, Cecchi,  
 ; ADDRESSEE: Stewart & Olstein  
 ; STREET: 6 Becker Farm Road  
 ; CITY: Roseland  
 ; STATE: NJ  
 ; COUNTRY: USA  
 ; ZIP: 07068-1739  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/469,667  
 ; FILING DATE: 06-JUN-1995  
 ; CLASSIFICATION: 536  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Ferraro, Gregory D.  
 ; REGISTRATION NUMBER: 36,134  
 ; REFERENCE/DOCKET NUMBER: 325800-435  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 201-994-1700  
 ; TELEFAX: 201-994-1744  
 ; INFORMATION FOR SEQ ID NO: 9:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 228 amino acids  
 ; TYPE: amino acid  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: protein  
 ; US-08-469-667-9  
 Alignment Scores:  
 Score: 1.5e-110 Length: 228  
 Percent Similarity: 1203.00 Matches: 228  
 Best Local Similarity: 100.00% Conservative: 0  
 Query Match: 39.57% Mismatches: 0  
 DB: 1 Indels: 0  
 Gaps: 0  
 US-09-049-696-19 (1-1683) x US-08-469-667-9 (1-228)  
 QY 693 GTCTACTCAAGGATTTTCACAACTTATGACACGAAAGTGATACAGTGAATGACGG 752

```

|||||
db 1 ValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyArgTyrSerValValArg 20
QY 753 GCTCTGGAGAGATTACGACGACGAGAGATGATCCCGACAGAGATGAGACTG 812
Db 21 AlaLeuGlyGlyValAsnAlaAlaArgArgValAlaLeuProGlnInserGlyAlaLeu 40
QY 813 TACATACCTGGCTGATGATGAAATGATGAATACATGGAATCCACCAAGCTGAAAT 872
Db 41 TyrIleProGlyTyrPheIleGlnAsnAspGlnIleGlnThrPsnProProArgProGlnIle 60
QY 873 AATAAGATGATGCTCAACACAAAGAGTGTTCAGACAGAAATCTCGGAGGCTCA 932
Db 61 AsnLysAspAspValGlnHisLysGlnValCysPheSerArgThrSerSerGlyLysSer 80
QY 933 TTGTGGCTTGTGATGCTCCCAATGCTCCCATACCTGATCTCTCCCACTGGCCAAATC 992
Db 81 PheValAlaSerAspValProAsnAlaProIleProAspLeuPheProProGlyGlnIle 100
QY 993 ACCGACCTGAAGCGGAAATTCACGGGGCAGTCTCATTAATCTGACTGGACAGCTCT 1052
Db 101 ThrAspLeuLysAlaGlnIleHisGlySerLeuIleAsnLeuThrThrPheAlaPro 120
QY 1053 GGGGATGATTATGACCATGGAACAGCTCAACATATATCATTCGAATGATCAAGTAT 1112
Db 121 GlyAspAspTyrAspHisGlyThrAlaHisLysTyrIleIleArgIleSerThrSerIle 140
QY 1113 CTTGATCTGAGACAGACATTCATGATCTCTTCAAGTAAATCTGCTGCATCCCA 1172
Db 141 LeuAspLeuAlaArgAspLysPheAsnGlnSerLeuGlnValAsnThrThrAlaLeuIlePro 160
QY 1173 AAGGAAGCCACACTCTGAGAGAGTCTTTGTTTAAACGAAACATTTCTTTGAAAT 1232
Db 161 LysGlnAlaAsnSerGlnIleValPheLeuPheLysProGlnAsnIleThrPheGlnAsn 180
QY 1233 GGCACAGATCTTTTCAATGCTATTCAGGCTGTGATAGGTCGATCGAATCAGAAAT 1292
Db 181 GlyThrAspLeuPheIleAlaIleGlnAlaValAspLysValAspLeuLysSerGlnIle 200
QY 1293 TCCACATTCGACAGATATCTTTGTTATTCCTCCACAGACCTCCGACAGACCTAGT 1352
Db 201 SerAsnIleAlaArgValSerLeuPheIleProProGlnIleThrProProGlnIleThrProSer 220
QY 1353 CCTGATGAAGCTGCTGCTCTGT 1376
Db 221 ProAspGlnThrSerAlaProCys 228

```

```

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/469,667
; FILING DATE: 06-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Petriolo, Gregory D.
; REGISTRATION NUMBER: 36,134
; REFERENCE/DOCKET NUMBER: 325800-435
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-994-1700
; TELEFAX: 201-994-1744
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 228 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-224-110-9
;
Alignment Scores:
Pred. No.: 1.5e-110
Score: 1203.00
Percent Similarity: 100.00%
Best Local Similarity: 100.00%
Query Match: 39.57%
DB: 4 Gaps: 0

US-09-049-696-19 (1-1683) x US-09-224-110-9 (1-228)
QY 693 GTCTACTCAAGGATTATTCACACTTATGACAGCAATGTAGATACGTGTAAGTGGCG 752
Db 1 ValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyArgTyrSerValValArg 20
QY 753 GCTCTGGAGAGATTACGACGACGAGAGATGATCCCGACAGAGATGAGACTG 812
Db 21 AlaLeuGlyGlyValAsnAlaAlaArgArgValAlaLeuProGlnInserGlyAlaLeu 40
QY 813 TACATACCTGGCTGATGATGAAATGATGAATACATGGAATCCACCAAGCTGAAAT 872
Db 41 TyrIleProGlyTyrPheIleGlnAsnAspGlnIleGlnThrPsnProProArgProGlnIle 60
QY 873 AATAAGATGATGCTCAACACAAAGAGTGTTCAGACAGAAATCTCGGAGGCTCA 932
Db 61 AsnLysAspAspValGlnHisLysGlnValCysPheSerArgThrSerSerGlyLysSer 80
QY 933 TTGTGGCTTGTGATGCTCCCAATGCTCCCATACCTGATCTCTCCCACTGGCCAAATC 992
Db 81 PheValAlaSerAspValProAsnAlaProIleProAspLeuPheProProGlyGlnIle 100
QY 993 ACCGACCTGAAGCGGAAATTCACGGGGCAGTCTCATTAATCTGACTGGACAGCTCT 1052
Db 101 ThrAspLeuLysAlaGlnIleHisGlySerLeuIleAsnLeuThrThrPheAlaPro 120
QY 1053 GGGGATGATTATGACCATGGAACAGCTCAACATATATCATTCGAATGATCAAGTAT 1112
Db 121 GlyAspAspTyrAspHisGlyThrAlaHisLysTyrIleIleArgIleSerThrSerIle 140
QY 1113 CTTGATCTGAGACAGACATTCATGATCTCTTCAAGTAAATCTGCTGCATCCCA 1172
Db 141 LeuAspLeuAlaArgAspLysPheAsnGlnSerLeuGlnValAsnThrThrAlaLeuIlePro 160
QY 1173 AAGGAAGCCACACTCTGAGAGAGTCTTTGTTTAAACGAAACATTTCTTTGAAAT 1232
Db 161 LysGlnAlaAsnSerGlnIleValPheLeuPheLysProGlnAsnIleThrPheGlnAsn 180
QY 1233 GGCACAGATCTTTTCAATGCTATTCAGGCTGTGATAGGTCGATCGAATCAGAAAT 1292
Db 181 GlyThrAspLeuPheIleAlaIleGlnAlaValAspLysValAspLeuLysSerGlnIle 200
QY 1293 TCCACATTCGACAGATATCTTTGTTATTCCTCCACAGACCTCCGACAGACCTAGT 1352
Db 201 SerAsnIleAlaArgValSerLeuPheIleProProGlnIleThrProProGlnIleThrProSer 220
QY 1353 CCTGATGAAGCTGCTGCTCTGT 1376

```



```

OY 183 ATCCAGCTTGAGAGTAAGGATTAACCTCCAGAACGCCAGTGATGATGACAGAGT 242
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 488 ILEGInleuGlusertLysAlaIleuAlaIlethnGlusLysTrpAlaSnGlYthrVal 507
OY 243 ATCCGTGGACAGACCGTGGAAAGACACTGTTGTTCTTATCACTGGACAAACGACCT 302
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 508 ProValAspSerThrIleGlusnAspThrPhePheValValThrTrpThrIleLys 527
OY 303 CCCCAATCTCTCTGGATCCCACTGACAG-----AAGCAAGTGGCTTTTGAGTG 356
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 528 ProGluIleleuGlusnAspProLysLysLysTrpLysThrSerAspPheLysGlu 547
OY 357 GACAAA--*AACACCAAAATGGCTTACCTCAAAATCCAGGATCTCAAGTTGGACCT 413
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 548 AspLysLeuAlaSnIleHisSerAlaArgLeuArgIleProGlyIleAlaGluThrGlyThr 567
OY 414 TGGAAATACAGTCTG-----CAAGCAAGCTCAAAACCTTGACCTGACTGTCAGC 464
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 568 TrpThrTySerLeuLeuAlaSnAsnHisAlaSerProGluIleleuThrValThrValThr 587
OY 465 TCCCGTGGCTCCAAATGCTACCTGCTCCAAATTAAGTACTTCCAAACGAACAAGAC 524
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 588 ThrArgAlaArgSerProThrThrProProValThrAlaThrAlaHisMetAsnGlnAsn 607
OY 525 ACCAGCAAAATTCAGGCTCTGTGATGTTATGCAAAATATTCGCCAAGGAGCTCCCA 584
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 608 ThrAlaHisTyProSerProValIleValIlyThrAlaGlnValSerGlnIlyPheLeuPro 627
OY 585 ATTCACAGGCGCCAGCTCAGCCCTGATGATGATGATGATGATGATGATGATGATGAT 644
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 628 ValLeuGlyIleAsnValThrAlaIleIleGluThrGluAspGlyHisGlnValThrLeu 647
OY 645 GAACCTACTGATGAATGAGAGCAGTGTCTGCTACTAAGATGAGCGTGTCTACTAAG 704
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 648 GluLeuTrpAspAsnGlyAlaGlyAlaAspAlaThrLysAspAspLysAlaTySerArg 667
OY 705 TATTCACAACTTATGACAGCAAGTATGATAGTAAAGTGGGCGCTGGAGAGA 764
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 668 TyPheThrThrTyAspThrAsnGlyArgTySerValLysValHisAlaGluAlaArg 687
OY 765 GTTAAAGCAGCAGCAGAGAGTATACCCAGAGAGTGAGCACTGTACATACCTGCG 824
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 688 AsnAsnThrAlaArgLeuSerLeuArgGlnProGlnAsnLysAlaLeuTyIleProGly 707
OY 825 TGGATTTGAGATGATGAATACATGAGATCCACCAAGCTGGAATTAATGATGATGAT 884
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 708 TyIleGluAsnGlyLysIleIleLeuAsnProProArgProGluVal--LysAspAsp 726
OY 885 GTTCAACACAGCAAGTGTG--TGTTCAGCAGACATCCTCGGAGGCTCATTTGGCT 941
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 727 LeuAlaLysAlaGluIleGluAspPheSerAlaGluThrSerIleLysThrPheThrVal 746
OY 942 TCTGATGTCCTCAATGCTCCATACCTGATCTCTTCCCACTGGCCAAATTCACGACCTG 1001
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 747 SerGlyAlaProProGlyAsnHisProSerValLeuProProAsnLysIleThrAspLeu 766
OY 1002 AAGCGG-----GAAATTACGGGGGCGACGTCAATTAACTGATGACAGCTCTCT 1052
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 767 GluAlaLysPheLysGluAspHis-----IleGlnLeuSerTrpThrAlaPro 782
OY 1053 GGGATGATTTATGACCATGACAGCAGTCAATGATATGATGATGATGATGATGAT 1112
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 768 AlaAsnValLeuAspLysGlyLysAlaAsnSerTyIleIleArgIleSerLysSerPhe 802
OY 1113 CTGTGATCTCAGACAGACAGTTCATGATCTTCTCAAGTGAATACTACTGCTCATCCA 1172
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 803 LeuAspLeuGlnLysAspPheAspAsnAlaThrLeuValAsnThrSerSerLeuLysPro 822
OY 1173 AAGCAAGCAACTCTGAGAGAGTCTTTTGTGTTAAACGAAACATTAATCTTTGAAAT 1232
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 823 LysGluAlaIleArgSerAspLysnAspPheGluPheLysProGluProPheArgIleGluAsn 842

```

```

OY 1233 GGCACAGATCTTTTCATTCATTCATTCAGCTGTGTGATGATGATGATGATGATGAT 1292
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 843 GlyThrAsnPheTyIleAlaValGlnAlaIleAsnGluAlaHisGlnLysSerGluVal 862
OY 1293 TCCACATTCGACAGCATATCTTTGTTATTCCTCCACAGACTCCGCCAGACACTACT 1352
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 863 SerAsnIleAlaGlnAlaIleLysPheIlePro-----MetProGluAspSerVal 879
OY 1353 CCT 1355
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 880 Pro 880

RESULT 6
US-09-193-562D-2
; Sequence 2, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Paul, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
; FILE REFERENCE: 18617, 0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 2
; LENGTH: 905
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells
US-09-193-562D-2

Alignment Scores:
Pred. No.: 1.2e-100 Length: 905
Score: 1106.00 Matches: 229
Percent Similarity: 68.75% Conservative: 79
Best Local Similarity: 51.12% Mismatches: 130
Query Match: 36.36% Indels: 10
DB: 4 Gaps: 6

US-09-049-696-19 (1-1683) x US-09-193-562D-2 (1-905)
OY 3 CAAATGTCGCCATCATCATCAGACAGTGGCTTTGGGCGCTCTGACGCTCAAGACTAGAG 62
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 431 ArgSerGlyAlaIleIleHisThrIleAlaLeuGlyProSerAlaIleAlaLysLeuGlu 450
OY 63 GAGCTGTCCAAATGACAGAGAGTGTACAGACATATGCTTCAGATCAAGTTCAGAAAT 122
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 451 ThrLysSerAsnMetThrGlyGlyTyArgPhePheAlaHisLysAspIle-----Thr 468
OY 123 GGCCTCATGATGCTTTTGGGCGCTTTCATGACGAAATGAGAGTGTCTCAGCGCTCC 182
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 469 GlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySerIleThrGlnGlnAla 488
OY 183 ATCCAGCTTGACAGATGAAGGATTAACCTCCCAAGACAGCACTGATGATGATGACAGTG 242
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 489 IlegInleuGlusertLysAlaIleuLysIleThrGlyArgValAsnIlyThrVal 508
OY 243 ATCCGTGGACAGACCGTGGAAAGACACTTGTTCATGATGATGATGATGATGATGAT 302
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 509 ProValAspSerThrValGlyAsnAspThrPhePheValValThrTrpThrIleGlnLys 528
OY 303 CCCCAATCTCTCTGGATCCCACTGACAG-----AAGCAAGTGGCTTTTGATG 356
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 529 ProGluIleValLeuGlnAspProLysGlyLysLysTyLysThrSerAspPheLysGlu 548
OY 357 GACAAA--*AACACCAAAATGGCTTACTCTCAATCCCAAGGATGCTCAAGTTGGACCT 413
    |||||.....:|||||.....:|||||.....:|||||.....:|||||.....:
Db 549 AspLysLeuAlaSnIleArgSerAlaArgLeuGlnIleProGlyIleAlaGluThrGlyThr 568
OY 414 TGGAAATACAGTCTG-----CAAGCAAGCTCAAAACCTTGACCTGACTGTCAGC 464

```

```

Db      569 TrpThrTyrSerLeuLeuAsnAsnHisAlaSerSerGlnMetLeuThrValThrValThr
Qy      465 TCCCGTCGCGCCATCGTACCCTGCTCCCAATACAGTGCATCTCCAAAGCAAGAC 524
Db      589 ThrArgAlaArgSerProThrIleProProValIleAlaThrAlaHisMetSerGlnHis
Qy      525 ACCAGCAAAATCCCGCCCTGCTGATGTTATGCAATATATCCCAAGACAGCTCCCA 584
Db      609 ThrIleHisTyrProSerPrometIleValTyrIleGlnValSerGlnGlyPheLeuPro 628
Qy      585 ATTTCAGGGCCAGTGCACAGCCCTGATTCATCAGTGAATGGAAGAAAACGTTACCTGG 644
Db      629 ValLeuIleIleSerValIleAlaIleIleGlnThrGlnAspGlnHisGlnValThrLeu 648
Qy      645 GAACTACTGATATGAGAGCGTGCATGCTCTAATGAGATGAGAGTGCAGGCTGTACTCAAGG 704
Db      649 GlnLeuTrpAspAsnGlyAlaGlyArgAspThrValIleAspAsnAspGlyIleTyrSerArg 668
Qy      705 TATTTCACAATCTATGACAGCAAGATGATGATACAGTGTAAAGTGCAGGCTGTGGAGGA 764
Db      669 TyrPheThrAspTyrTyrGlyAsnGlyArgTyrSerLeuLysValHisAlaGlnAlaArg 688
Qy      765 GTTACCCAGCCAGCAGAGAGTGAATCCCGCAGCAGAGTGCAGCAGTGTACATACCTGGC 824
Db      689 AsnAsnThrIleAlaArgLeuAsnLeuArgGlnProGlnAsnLysValLeuTyrValProGly 708
Qy      825 TGATTCAGATGATGATGATATACATGATATCCACAGACCTGTAATTAATTAAGATGAT 884
Db      709 TyrValIleLysnGlyLysIleIleLeuAsnProAlaArgProGlnValLysAspAspLeu 728
Qy      885 GTTCACACAGCAAGATGTGTTCAGCAGCAACATCTCTGGAGGCTCATTTGTGCTCT 944
Db      729 AlaIysAlaLysIleGlnAspPheSerArgLeuThrSerGlySerPheThrValSer 748
Qy      945 GAGTCT---CCAAATGCTCCCATACCTGCATCTCTCCACCTGGCCAAATCACCAGCTG 1001
Db      749 GlyAlaProProGlyAsnHisProSerValPheProProSerLysIleThrAspLeu 768
Qy      1002 AAGCGCAAAATTCACGGGGGAGTCTCATTAATCTGACTGACAGCTCCCGGGGATGAT 1061
Db      769 GlnAlaLysPheLys---GlnAspTyrIleGlnLeuSerTrpThrAlaProGlyAsnVal 787
Qy      1062 TATGACCATGAAACAGCTCACAAGTATATCATTCGAAATGATACAGTATCTTGATCTC 1121
Db      788 LeuAspLysGlyLysAlaAsnSerTyrIleIleArgIleSerLysSerPheMetAspArg 807
Qy      1122 AGAGACAAATTCATGATCTCTTCAAGTGAATCTACTGCTCATGCCCAAGGAAGCC 1181
Db      808 GlnGlnAspPheAspAsnAlaThrLeuValAsnThrSerAsnLeuIleProLysGlnAla 827
Qy      1182 AACCTGAGAGAGCTCTTTTGTTTAAACAGAAACATTACTTTTGAATGGCAGAT 1241
Db      828 GlySerLysLysnAsnProGlnPheLysProGlnHisPheArgValGlnAsnGlyThrLys 847
Qy      1242 CTTTTCATTCCTATTCAGGCTGTGATAGGTGATGATGCAATCAGAAATATCCACAT 1301
Db      848 PheTyrIleSerValGlnAlaIleAsnGlnAlaAsnLeuIleSerGlnValSerHisIle 867
Qy      1302 GCACGACTATCTTTGTTATTCCT 1325
Db      868 ValGlnAlaIleLysPheIlePro 875

```

```

; CURRENT FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 34
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.: 1,46e-99 Length: 902
Score: 1095.00 Matches: 237
Percent Similarity: 66.26% Conservative: 85
Best Local Similarity: 48.77% Mismatches: 132
Query Match: 36.02% Indels: 32
DB: Gaps: 11

US-09-049-696-19 (1-1683) x US-09-193-562D-34 (1-902)
Qy      3 CAAAGTGGTCCATCATCCACAGCTGTTGGGGCCCTGCAGCTCAAGACTAGAG 62
Db      430 ArgSerGlyAlaIleIleIleIleIleIleIleAlaLeuGlyProSerArgAlaArgGlnLeuGln 449
Qy      63 GAGCTGTCCAAATGACAGAGGTTTACAGACATATGCTTCAGATCAAGTTCAGAACAT 122
Db      450 ThrLeuSerAspMetThrGlyGlyLeuArgPheTyrAlaAsnLysAspLeu-----Asn 467
Qy      123 GGCCTCATGATGCTTTGGGCCCTTTTCATCAGAAATGAGCTGTCTCAGCGCTCC 182
Db      468 SerLeuIleAspAlaPheSerArgIleSerThrSerGlySerValSerGlnAla 487
Qy      183 ATCCAGCTGAGATGATGATTAACCTCCAGAACCCAGAGGATGATGGCAGAGT 242
Db      488 LeuGlnLeuIleLysSerLysAlaPheAspValArgAlaGlyAlaThrIleAsnGlyThrVal 507
Qy      243 ATCGTGACAGCAACCGTGGAAGAGACATTTGTTCTTATCACTCTGACACAGCCT 302
Db      508 ProLeuAspSerThrValGlyAsnAspThrPhePheValIleThrTrpMetValLysLys 527
Qy      303 CCCCAATCTTCTCTGCGATCCAGTGCAGACAG-----CAGGTGCTTTGTATGTG 336
Db      528 ProGlnIleIleLeuGlnAspProLysGlyLysLysTyrThrThrSerAspPheGlnAsp 547
Qy      357 GACAAA---AACACCAAAATAGGCTATCCCAATCCAGACCTGCTAGGTGGCAGT 413
Db      548 AspLysLeuAsnIleArgSerAlaArgLeuGlnIleProGlyThrAlaGlnThrGlyThr 567
Qy      414 TGGAAATACAGTCTGCAAGCAAGC---TCACAAACCTTGACCTGACCTGACGTCGCT 470
Db      568 TrpThrTyrSerTyrThrGlyThrLysSerGlnLeuIleThrMetThrValThrThrArg 587
Qy      471 GCGTCCATCTTACCCCTGCTCAATATACAGTACTTCCAAACGAAACAGACACCAGC 530
Db      588 AlaArgSerProThrMetGlnProLeuLeuGlyTyrCysTyrMetSerGlnSerThrAla 607
Qy      531 AAATTCGCCAGCCCTCGTAGTTTATGCAAAATATGCCAAGAGAGCTCCCAATCTTC 590
Db      608 GlnTyrProSerArgMetIleValTyrAlaArgValSerGlnLysPheLeuProValLeu 627
Qy      591 AGGCGCAGTGTCAAGCCCTGATGATGATCAAGTGAATGGAAGAAAACGTTACCTGGAATA 650
Db      628 GlyAlaAsnValThrAlaLeuIleGlnAlaGlnHisGlyHisGlnValThrLeuGlnLeu 647
Qy      651 CTGATATATGAGCAGAGTGTGATGCTACTTAAGAGAGAGGTGTCTACTCAAGTATTC 710
Db      648 TrpAspAsnGlyAlaGlyAlaAspIleValLysAsnAspLysIleTyrThrArgTyrPhe 667
Qy      711 ACAACTATGACAGCAAGTGTGATGATCAAGTGAATGGAAGGCGCTCGGAGAGAGATAAC 770
Db      668 ThrAspTyrHisLysnGlyArgTyrSerLeuLysValArg-----ValGln 683
Qy      771 GCAGCCAGACGAGAGTGT-----ATACCCACAGAGTGCAGCAGCTGATACATACCT 821

```





```

Db 761 PheThrValSerGlyValProProAsnGlyAsnHisSerGlnValPheSerProGlyLys 780
QY 990 ATACGCGACTGAGAGCGGAAATTCACGGGGGAGCTCTATTAATCTGACTTGACAGCT 1049
Db 781 IleValAspLeuGlnValAlaLysPheGlnGlyAspHis---IleGlnLeuSerTrpThrAla 799
QY 1050 CCGGGGATGATATGACCTGAGACAGCTCACAAAGTATTCATTCGAAATGACAGT 1109
Db 800 ProGlyLysValLeuAspLysGlyArgAlaGlnSerTrpIleIleArgIleSerLysHis 819
QY 1110 ATTCTGATCTCAGACAGCAAGTTCATGAATCTCTTCAAGTGAATACCTAGCTCTCATC 1169
Db 820 PheLeuAspLeuGlnGlnValAspPheAspLysAlaAlaLeuIleAsnTrpSerGlyLeuIle 839
QY 1170 CCAAGAGAGCCAACTCTGAGGAAGTCTTTTGTATTAACACAGAAACATTACTTTGAA 1229
Db 840 ProLysGlnProGlySerValGlnSerPheGlnPheLysProGlnProSerLysIleGln 859
QY 1230 AATGCGACAGATCTTTTCATTTGCTATTCAGCGCTGTGATGAGTGCATTCGAATCAGAA 1289
Db 860 AsnGlyThrThrPheTrpIleAlaIleGlnAlaIleHisGlnAlaAsnValThrSerGln 879
QY 1290 AATACCAACATTCGACAGATCTTTGTTTATCTCTCCACAGACTCCG 1337
Db 880 ValSerAsnIleAlaGlnAlaThrAsnPheIleProProGlnLupPro 895

```

## RESULT 9

```

US-09-193-562D-32
: Sequence 32, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: PRIOR FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 32
: LENGTH: 943
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-193-562D-32

```

## Alignment Scores:

```

Id. No.: 6,21e-89 Length: 943
Percent Similarity: 987.50 Matches: 210
Best Local Similarity: 62.79% Conservative: 87
Query Match: 32.48% Mismatches: 145
Db: 4 Gaps: 10

```

US-09-049-696-19 (1-1683) x US-09-193-562D-32 (1-943)

```

QY 6 AGTGGGCGCATCATCCACAGTGGCTTGGGCGCCCTGCTGACATCAAGATAGAGAG 65
Db 436 SerGlySerThrIleHisSerIleAlaLeuGlySerSerAlaIleProAsnLeuGln 455
QY 66 CTGTCCAAATGACAGAGGATTACAGATATGCTTCACATCAAGTTCAGAAATGGC 125
Db 456 LeuSerArgLeuThrGlyGlyLeuLysPhePheValProAspLysSerAsnSerAsnSer 475
QY 126 CTGATTCATCTTTGGGCGCCCTTCATCAGAAATGAGAGCTGTCTCTCAGCGCTCATC 185
Db 476 MetIleAspIlePheSerArgIleSerSerGlyThrGlyAspIlePheGlnHisIle 495
QY 186 CAGCTTGAGGTAAAGGATTAAACCTCCAGAACAGCCAGTGGATGATGGCACAGTATC 245
Db 496 GlnLeuGlnSerThrGlyGlnAsnValLysProHisGlnLeuLysAsnThrValThr 515

```

```

QY 246 GTGACAGACACCCGTGGGAAAGACACTTGTCTTATATCAGCTGG---ACAGCAGACCT 302
Db 516 ValAspAsnThrValGlnAsnAspIleMetPheLeuValThrTrpGlnAlaSerGlyPro 535
QY 303 CCCCAAAATCTTCTGTGGGATCCCAAGTGCACAGAG-----CAAGTGGCTTTGATGT 356
Db 536 ProGlnIleLeuPheAspProAspGlyArgLysTrpIleThrAsnAspPheThr 555
QY 357 GACAAAACACCAAAATGGGCTACCTCCAAATCCAGGCTGCTAGGTGGTGGACACTGG 416
Db 556 AsnLeuThrPheArgThrAlaSerLeuTrpIleProGlyThrAlaLysProGlyHisTrp 575
QY 417 AAATAGAGCTG-----CAAGCAGCTCACAACCTTGCAGCCTGACTGTACGTCC 467
Db 576 ThrTrpThrLeuAsnAsnThrHisHisSerLeuGlnAlaLeuLysValThrValThrSer 595
QY 468 CTTGCGCTCAATCTTACCTGCTCCATTTACAGTCTTCCAAAAGCAAGAGACACC 527
Db 596 ArgAlaSerAsnSerAlaValProProAlaThrValGlnValPheValGlnArgAspSer 615
QY 528 AGCAAAATCCCGCAGCCCTGTGATTTATGCAAAATTTGCGCAGAGAGCTCCCAAT 587
Db 616 LeuHisPheProHisProValMetIleTrpAlaAsnValLysGlnGlyPheTrpIle 635
QY 588 CTCAGGCGCAGTGTCAAGCCCTGATTAATGATGATGAAATGAAACAGTTACCTTGGAA 647
Db 636 IleAsnAlaThrValThrAlaThrValGlnProGlnThrLysAspProValThrLeuArg 655
QY 648 CTACTGATTAATGAGACAGCTGCTGATCTTAAGAGTACAGGTGTCTACTAGAGTAT 707
Db 656 LeuLeuAspAspGlyAlaGlyAlaAspValIleLysAsnAspLysIleTrpSerArgTrp 675
QY 708 TTCACAATTATGACACGAATGGTATGATACAGTAAATGGCGGCTGTGGAGAGTAT 767
Db 676 PhePheSerPheAlaAlaAsnGlyArgTrpSerLeuLysValHis-----Val 691
QY 768 AACGACCCAGACGAGAGTATACCCACAG-----AGTGAGACAGCTGTAC 815
Db 692 AsnHisSerProSerIleSerThrProAlaHisSerIleProGlySerHisAlaMetTrp 711
QY 816 ATACCTGTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 875
Db 712 ValProGlyTrpThrAlaAsnGlyAsnIleGlnMetAsnAlaProArgLysSerValGly 731
QY 876 AAGGATGATGTTCAACACCAAGTGTCTTTCAGCAGACATCTCCGAGAGCTATTT 935
Db 732 ArgAsnGlnGlnValGlyTrp---GlyPheSerArgValSerSerGlyLysSerPhe 750
QY 936 GTGGCTTGTGATGTCCCAAAATGCTCCCATGATCTGTCCACCTGGCCAAATCAC 995
Db 751 SerValLeuGlyValProAlaGlyProHisProAspValPheProProCysLysIleIle 770
QY 996 GACCTGAAGCGGAAATATCACGGGGGAGCTGTATTAATGTAGTACTGGACAGCTCGGG 1055
Db 771 AspLeuGlnAla---ValLysValGlnGlnLeuLeuThrLeuSerTrpThrAlaProGly 789
QY 1056 GATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1115
Db 790 GlnAspPheAspGlnGlnAlaThrSerTrpGlnIleArgMetSerLysSerLeuGln 809
QY 1116 GATCTCAGACAGATTCATGAATCTCTCAAGTGAATCTAGTGTCTATCCCAAG 1175
Db 810 AsnIleGlnAspAspPheAsnAsnAlaIleLeuValAsnThrSerLysAspAsnProGln 829
QY 1176 GAAGCCAACTCTGAGGAAGTCTTTTGTATTAACSCAGAAACATTAATTTGAAATGGC 1235
Db 830 GlnAlaGlyLysLeuArgLysIlePheThrPheSerProGlnIleSerThr-----AsnGly 847
QY 1236 ACAGAT-----CTTTCAATTCATTCATTCATTCATTCATTCATTCATTCATTCAT 1259
Db 848 ProGlnHisGlnProAsnGlyGlnThrHisGlnSerHisArgIleTrpValAlaIleArg 867
QY 1260 GCTGTGATGATGAGTGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1319

```



```

Db      868 AlamelatargAdnSerLeuSerLeuSerLeuValSerSerLeuLeuAlaGlnAlaProLeuPhe 887
OY      1320 ATTCTCCACAGACTCCGCCACAGACACATGACTTCCTGAT 1358
Db      888 IleProfaAnSerAspPro---ValProfaIarAsp 899

RESULT 10
US-09-193-562D-11
/ Sequence 11, Application US/09193562D
/ Patent No. 6309857
/ GENERAL INFORMATION:
/ APPLICANT: Pauli, Nucleicht U.
/ TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
/ TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
/ FILE REFERENCE: 18617.0052
/ CURRENT APPLICATION NUMBER: US/09/193.562D
/ CURRENT FILING DATE: 1998-11-17
/ PRIOR APPLICATION NUMBER: US/60/065.922
/ PRIOR FILING DATE: 1997-11-17
/ NUMBER OF SEQ ID NOS: 47
/ SEQ ID NO 11
/ LENGTH: 795
/ TYPE: PRT
/ ORGANISM: Unknown
/ FEATURE:
/ OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

Alignment Scores:
Score: 1,26e-80 Length: 795
Percent Similarity: 903.00 Matches: 189
Best Local Similarity: 68.03% Conservative: 60
Query Match: 51.64% Mismatches: 107
                29.70% Indels: 10
                4 Gaps: 6

US-09-049-696-19 (1-1683) x US-09-193-562D-11 (1-795)
OY      3 CAAAGTGGTCATCATCCACACAGTGGCTTTGGGCGCTTCAGCTCAAGACTAGAG 62
      ::::::::::::::::::::
Db      431 ArgserGlyAlaIleIleHisThrIleAlaLeuGlyProSerAlaAlaIalysGlnLeuGlu 450
OY      63 GAGCTGTCCAAATATGACAGAGAGGTTTACACAGCATATGCTTCAGATCAGTTCAAGAACAT 122
      |||
Db      451 ThrIysSerAlaMetThrGlnGlyTyrArgPhePheAlaSerIleThrGlnGlnAla 468
      ::::::::::::::::::::
OY      123 GGCCCATGATGCTTTTGGGGCCCTTTCATCAGGAATGGAGCTGTCTCAGCGCTCC 162
      ||||| ::::::::::::::::::::
Db      469 GlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySerIleThrGlnGlnAla 488
      ::::::::::::::::::::
OY      183 ATCCAGCTTGAGAGTAAAGGAGTAAACCTCCAGAAACGCCAGTGGATGAGCACAGTG 242
      ||||| ::::::::::::::::::::
Db      489 IleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgLysArgValAsnGlyThrVal 508
      ::::::::::::::::::::
OY      243 ATCGTGCACAGCACCGTGGGAAAGACACTTTGTTTCTTATCACTGAGACGACGCT 302
      ||||| ::::::::::::::::::::
Db      509 ProValAspSerThrValGlyAsnAspThrPhePheValValThrPThrIleGlnLys 528
      ::::::::::::::::::::
OY      303 CCCCAATCTTCTCTGGGATCCSAGTGCAGAG-----AAGCAAGGTGGCTTTGTAGTG 356
      ||||| ::::::::::::::::::::
Db      529 ProGlnIleValLeuGlnAspProLysGlyLysLysTyrLysThrSerAspPheLysGlu 548
      ::::::::::::::::::::
OY      357 GACAAA---AACACCAAAATGGCTACCTCCAAATCCACAGGCACTGTAGCTTGACACT 413
      ||||| ::::::::::::::::::::
Db      549 AspLysLeuAsnIleLeuGSerAlaArgLeuIleIleProGlyIleAlaGlnThrGlyThr 568
      ::::::::::::::::::::
OY      414 TGGAAATCACTGTG-----CAAGCAAGTCCACAAACCTTGACCCCTGAGCTGTACG 464
      ||| ::::::::::::::::::::
Db      569 TrpThrTyrSerLeuLeuAsnAlaHisAlaSerGlnIleMetLeuThrValThrValThr 588
      ::::::::::::::::::::
OY      465 TCCCGATGCGCAATGCTACCGCTGCTCCCAATTACAGTGACTTCCAAAGCAACGAAAGAC 524
      ::::::::::::::::::::

```

Db	589	ThraGalaIaGserProthrlleProProValIIleAlaIhAlaHIsmetSerInHs	608
QY	525	ACCAACAATATCCCCAGCCCTCTGGTAGTTATGCAAAATTTGGCCAAAGACCTCCCA	584
Db	609	ThrlAaIstYrProSerPrometIIleValItyrAlaGlnValSerGlnIlypheLeuPro	628
QY	585	ATTCGACGGCCAGTGTGCACAGCCCTGATTTGATTCAGTGAATGGAAAAACATTCACCTTG	644
Db	629	ValleuGlyIIeserValIIleAlaIIleIleGlnIhGlnuSpolYhIsclnValIhIreu	648
QY	645	GAACCTACTGATTAATGGAGCAGGTGCTGATGCTACTAAGAGATCCGCTGTACTCAAG	704
Db	649	GluIeurtPraspAnsngIyAlaGlyAtgAspIrhValIysAnsmpIyIleItySerIatg	668
QY	705	TATTTACACACTTATGACACAGATGTGATACAGTGTAAAGTGGCGCTCTGGAGAGA	764
Db	669	TyrIphetIhrAspIryTYrGlyAsnGlyArgTYrSerIeuIysValIhIsAlaGlnAlaIary	688
QY	765	GTTAAAGCAGGCACAGGAGAGGATGATCCCCACAGAGTGGAGCACTGTACATTAACCTGGC	824
Db	669	AsnAsnIhrlAlaAqLeuAnsIleAaGlnPrroGlnhAnsIyValIeutyryValProGly	708
QY	825	TGGATTTGAATGTGATTAATACATGGAATCCACCAAGACCTGAAATTTAATAGATGAT	884
Db	709	TyrValGluAnsngIyIleIleIleAnsPrroArgrProIuValIyIysAspIreu	728
QY	885	GTTCAACACAGCAAGATGTGTCTTCACAGACAATCCTGGGAGCCTCATTTGTGGCTTCT	944
Db	729	AlaIysAlaIyIleGlnuAspIhSerArgIeuthrSerGlyIySerphetIryAlSer	748
QY	945	GATGTC---CCAAATGCTCCCATACCTGATCTCTTCCCACTGGCCAAATTCACGCACTG	1000
Db	749	GlyAlaPrroProGlyAnsIhIspSerSerValIphetProSerIyIleIhIraspIreu	768
QY	1002	AAGCGGAATTTACAGGGGCGACGTCATTAATCTGACTTGGACAGCTCTGGGATGAT	1060
Db	769	GlnuAlaIysPheIys---GluAspTYrIIleGlnIeIuSerItrPhrlaIarProIyAnsVal	787
QY	1062	TATGACCATGGACAGCT	1079
Db	788	LeuAspIyGlyIysAla	793
RESULT 11			
US-09-193-562D-12			
; Sequence 12, Application US/09193562D			
; Patent No. 6309857			
; GENERAL INFORMATION:			
; APPLICANT: Pauli, Benedicht U.			
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium			
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules			
; FILE REFERENCE: 18617.0052			
; CURRENT APPLICATION NUMBER: US/09/193,562D			
; CURRENT FILING DATE: 1998-11-17			
; PRIOR APPLICATION NUMBER: US/60/065,922			
; PRIOR FILING DATE: 1997-11-17			
; NUMBER OF SEQ ID NOS: 47			
; SEQ ID NO 12			
; LENGTH: 821			
; TYPE: PRT			
; ORGANISM: Unknown			
; FEATURE:			
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells			
US-09-193-562D-12			
Alignment Scores:			
Pred. No.: 1.28e-80			
Score: 903.00			
Percent Similarity: 68.03%			
Best local Similarity: 51.64%			
Query Match: 29.70%			
DB: 4			
Gaps: 6			

OY	3	CAAGTGTGGCAATCAATCCACAGACGGCTTTGGGCGCCCTGGACGCTCAACAACTAGG	62
Db	431	ArgserGlyAlaIleIleHisThrIleAlaIleGlyProSerAlaIleAlaLysGluLeuGlu	450
OY	63	GAGCTGCCAAATGACAGGAGGTGTACACACTATGCTTCAGATCAAGTTCAGAACT	122
Db	451	ThrLysSerAsnMetThrGlyGlyTyrArgPhePheAlaAsnLysAspLe-----Thr	468
OY	123	GGCCTCATGATGCTTTTGGGGCCCTTTCATCAGAAATGGAGCTGTCTCTAGGCTCC	182
Db	469	GlyLeuThrAsnAlaPheSerArgIleSerSerArgSerGlySerIleThrGlnGlnAla	488
OY	183	ATCCAGCTTGAGATAGGATGATACCCCTCCACAAACAGACAGCTGGATGACGACAGT	242
Db	489	IleGlnLeuGlnSerLysAlaLeuLysIleThrGlyArgLysArgValAsnGlyThrVal	508
OY	243	ATCTGGACACACCGCTGGGAAAGACACTTTGTTCTTATCACTGGACAAACGACCT	302
Db	509	ProValAspSerThrValGlyAsnAspThrPhePheValValThrThrPheIleGlnLys	528
OY	303	CCCCAAATCCCTTCTGGATCCACAGGACGAC-----AACGAGGTGGCTTTGTAGG	356
Db	529	ProGluIleValIleGlnAsnProGlySerGlyLysLysTyrLysThrSerAspPheLysGlu	548
OY	357	GACAAA--AACACCAAAATGGCGCTACCTCCAAATCCAGGACATTGCTAAGTTGGACT	413
Db	549	AspLysLeuAsnIleArgSerAlaArgLeuGlnIleProGlyTylleAlaGluThrGlyThr	568
OY	414	TGGAAATACAGTGG-----CAAGAGGTGCACAAACCTTGACCTGGACTGACAG	464
Db	569	ThrPheTyrSerLeuLeuAsnAsnHisAlaSerSerGlnMetLeuThrValThrValThr	588
OY	465	TCCCGTGCCTCAATGCTACCTCCCTCCCAATTCAGTACCTTCCAAACGAAACGAGAC	524
Db	589	ThrArgAlaArgSerProThrIleProProValIleAlaIleThrAlaHisMetSerGlnHis	608
OY	525	ACCGACAAATCCCGACGCTCTGGTAGTTTATGCAAAATATTCGCCAAGGACCTCCCA	584
Db	609	ThrIleAsnTyrProSerPrometIleValTyrAlaGlnValSerGlnGlyPheLeuPro	628
OY	585	ATTCTAGGGGCACTGTCACAGCCCTGGATTCAGTACGTAAAGGAAAACTATTCCTTG	644
Db	629	ValLeuGlyIleSerValIleAlaIleIleGluThrGluAsnProLysIleGlnValThrLeu	648
OY	645	GAACTACTGATAATGAGCAGGCTGCTGATGCTACTAAGATGACGGTGTACTCAAG	704
Db	649	GluLeuThrAspAsnGlyIaGlyArgAspThrValLysAsnAspGlyLyleuTyrSerArg	668
OY	705	TATTTCACACTTATGACAGAGTGGATGATACAGTAAAGTGAAGCGGCGCTGGGAGGA	764
Db	669	TyrPheThrAspTyrTyrGlyAsnGlyArgTyrSerLeuLysValHisIleGlnAlaArg	688
OY	765	GTTACACGACGACAGCAGAGATGATACCCACAGCAGTGGAGCACTGATCACTACGCG	824
Db	689	AsnAsnThrAlaArgGlyLeuAsnLeuArgGlnProGlnAsnLysValLeuTyrValProGly	708
OY	825	TGGATTGAGATGATGAATATACATGGAATCCACCAAGACCTGAATATATAGGATGAT	884
Db	709	TyrValGluAsnGlyLysIleIleLeuAsnProProArgProGluValLysAspLeu	728
OY	885	GTTCAACACACGAAAGTGTTTACAGACAAATCCCGGAGGCTCATTTGTGGCTCT	944
Db	729	AlaLysAlaLysIleGluAspPheSerArgLeuThrSerGlyGlySerPheThrValSer	748
OY	945	GATGTC--CCAAATGCTCCCATACCTGATCTCTCCACCTGGCCAAATTCACGACCTG	1001
Db	749	GlyAlaProProProGlyAsnHisProSerValPheProProSerLysIleThrAspLeu	768
OY	1002	AAGCGGAAATTCACGGGGGCACTTCATTAATCTACTTTGGACAGCTCTCTGGGATGAT	1061
Db	769	GluAlaLysPheLys---GluAspTyrTylleGlnLeuSerThrPheAlaProGlyLysAsn	787

```

Oy      1062  TATGACATGTGAACGCT 1079
          ||| ||| |||
Db      788  LeuAspIysGlyIysAla 793

RESULT 12
US-09-193-562D-3
Sequence 3, Application US/09193562D
Patent No. 6309857
GENERAL INFORMATION:
APPLICANT: Pauli, Benedict U.
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
FILE REFERENCE: 18617.0052
CURRENT APPLICATION NUMBER: US/09/193,562D
CURRENT FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US/60/065,922
PRIOR FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 3
LENGTH: 203
TYPE: PRT
ORGANISM: Unknown
FEATURE:
OTHER INFORMATION: Lu-ECAM-1 associated protein from bovine endothelial cells
US-09-193-562D-3

```

Pred. No.:	4,64e-32	Length:	203
Score:	408.00	Matches:	84
Percent Similarity:	67.05%	Conservative:	32
Best Local Similarity:	48.53%	Mismatches:	35
Query Match:	13.42%	Indels:	2
DB:	4	Gaps:	2

US-09-049-696-19 (1-1683) x US-09-193-562D-3 (1-203)

QY	810	CTGACACTACCTGGCTGGATTGGAAATGATGAATAATCAATGSAATTCAGAACAGACCTGAA	869
Dd	2	LeuValAlaProGluTyrValGIuaInGlyLysIleIleLeuAsnProTrpArgProGlu	21
QY	870	ATTAAATAGAGTAGATGTTCACACACAAGAAGTGTTGTTCAGACAGAAACATCCCGGAGGC	929
Dd	22	ValLysAspSerPheuAlaLysAlaLysIleGIuaSPheSerArgLeuThrSerGly	41
QY	930	TCAATTGTGGCTCTGTGATGTC--CCAAATGCTCCATACCTGATCTCTCCACCTGGC	986
Dd	42	SerPheThrValSerGIuaLaProProProGluAsnHisProSerValPheProProSer	61
QY	987	CAATTCACGACCATCGAAGGGGAAATTCACGGGGGAGCTCATTAATCTGACTGGACA	1046
Dd	62	LysIleThrAspLeuGIuaLysPheLys--GIuaSPtyrIleGIuLeuSerTrpThr	80
QY	1047	GCTCCCTGGGAGTATTATGACCATTGGACAGCTCACAAAGTATATCTGGAATAGTACA	1106
Dd	81	AlaProGluAsnValLeuAspLysGIyLSalAsnSerTyrIleIleArgIleSerLys	100
QY	1107	AGTATTCCTATCTCCAGACAGCAAGTTCATGATCTCTTCAGTGAATATCTGCTGCC	1166
Dd	101	SerPheMetLaspArgInGIuaSPheAspAsnAlaThLeuValAsnThrSerAsnLeu	120
QY	1167	ATCCCAAAGGAGCAACTGTGAGGAAGTCTTTTGTATTAACACGAAAAATTTACTTTT	1226
Dd	121	IleProLysGIuLaGIySerLysGIuaSnPheGIuPheLysProGIuHISPhenArgAl	140
QY	1227	GAAAATGGCACAGATCTTTTCATCTGCTATTCACGCTGTTGATAGGTGCATGAATCA	1286
Dd	141	GIuaSngLIyThrLysPheTyrIleSerValGIuAlaIleAsnGIuLaAsnLeuIleSer	160
QY	1287	GAATATTCACAATGGACAGCATGTTGTTTATTCCT	1325
Dd	161	GIuValSerHisIleValGIuAlaIleLysPheIlePro	173

RESULT 13

US-08-296-791-6  
 : Sequence 6, Application US/08296791  
 : Patent No. 6245337  
 : GENERAL INFORMATION:  
 : APPLICANT: St. Geme III, Joseph W.  
 : APPLICANT: Falkow, Stanley  
 : TITLE OF INVENTION: Haemophilus Adherence and Penetration  
 : TITLE OF INVENTION: Protein  
 : NUMBER OF SEQUENCES: 9  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESS: Flehr, Hohbach, Test, Albritton & Herbert  
 : STREET: 4 Embarcadero Center, Suite 3400  
 : CITY: San Francisco  
 : STATE: California  
 : COUNTRY: United States  
 : ZIP: 94111-4187  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: Patent Release #1.0, Version #1.25  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/296,791  
 : FILING DATE: 25-AUG-1994  
 : CLASSIFICATION: 435  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: Tregeatlin, Richard F.  
 : REGISTRATION NUMBER: 31,801  
 : REFERENCE/DOCKET NUMBER: A-59941/RET/RMS  
 : TELEPHONE: (415) 781-1989  
 : TELEFAX: (415) 398-3249  
 : TELEX: 910 2727299  
 : INFORMATION FOR SEQ ID NO: 6:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 1848 amino acids  
 : TYPE: amino acid  
 : TOPOLOGY: unknown  
 : US-08-296-791-6

Alignment Scores:  
 Pred. No.: 0.00753 Length: 1848  
 Score: 117.50 Matches: 123  
 Percent Similarity: 31.94% Conservative: 53  
 Best Local Similarity: 22.32% Mismatches: 186  
 Query Match: 3.87% Indels: 189  
 DB: 4 Gaps: 28

-09-049-696-19 (1-1683) x US-08-296-791-6 (1-1848)

```

Oy 3 CAAGTGGTGCATATCCACACAGTGGGCGCCCTGCGACGTCAAGACTAG 62
Db 607 GlnspsanarqserTyrTyrThrleuLysGlyAlaSerThnArgSerGluLeuPro 626
Oy 63 GAGCTGTCAAAATGACA-----GGAGGTTTCACAGCATATGCT 101
Db 627 GlnspsanarqserGlnSerGlnsGlnsntPrleuTyrMetGlyArgThnSerAlaAla 646
Oy 102 TCAGATCAAGTTCAGAC-----AATGGCTCATTTGATCTTTT 140
Db 647 LysArqsnValMetAsnHisIleAsnAsnGlnArgMetAsnGlyPheAsnGlyThrPhe 666
Oy 141 GGGGGCCCTTCATCGAAGAAATGAGCTGTCTGTCAGCCCTCATCCAGCTTGAAGTAA 200
Db 667 Gly-----GluGluGluThrLysAlaThrGlnAsnGlyLysLeuAsnValThrPheAsn 684
Oy 201 GAGTAACTCCAGACAGCCAGTGAATGAGACAGTATGATG-----GACAGC 254
Db 685 GlyLysSerAspGlnAsnArgPheLeuLeuThrGlyGlyThnAsnLeuAsnGlyLysPhe 704
Oy 255 ACCGTGGAAAGACACTTTGTTTGTATACCTGGACAGCAGCAGCCCAAAATCTT 314
Db 705 AsnValGluLysGlyThrLeuPheLeuSerGlyArgProThrProHisAlaArgAspIle 724
  
```

```

Oy 315 CTCTGGATCCCGAGACAGACAGGTGGCTTTGTA----- 353
Db 725 AlaGlyIleSerSerThrLysLysAspProHisPheThrGlnAsnGlnValValVal 744
Oy 354 -----GTGACAAAAACACAAATGGCTTACCTCCAAATCCAGCAATGCT 401
Db 745 GlnAspAspTrpIleAsnArgsnPheLysAlaThrThnMetAsnValThrGlyAsnAla 764
Oy 402 AAGTTGGCACTTGAATATACAGTGTGCAAGACACTCACAACCTTGACCTGTGCTG 461
Db 765 -----SerLeuTyrSerGlyArgAsnValAlaAsnIleThrSer 777
Oy 462 ACGTCCCGTCGTCCAAT-----GTAACCTGCTCCCAAT 497
Db 778 AsnIleThrAlaSerAsnAsnAlaGlnValHisIleGlyTyrLysThrGlyAspThrVal 797
Oy 498 ACAGTGACTTCCAAA-----ACGAACAAG 521
Db 798 CysValArgSerAspTyrThrGlyTyrValThrCysHisAsnSerAsnLeuSerGlyLys 817
Oy 522 GACACCAGCAATTC-----CCAGCCCTGTGAGTTTATGCAAAATTCGCCAGAGCC 578
Db 818 AlaLeuAsnSerPheAsnProThrAsnLeuArgGlyAsnValAsnLeuThrGlnAsnAla 837
Oy 579 TCCCAATTC-----AGGGCCAGTGTCAACAGCCCTGATTTGAATGATGGAAGAAAACA 635
Db 838 SerPheThrLeuGlyAlaAsnLeuPheGlyThrIleGlnSerIleGlyThrSerGln 857
Oy 636 GTTACCTTGAA----- 647
Db 858 ValAsnLeuLysGlnAsnSerHisTrpHisLeuThrGlyAsnSerAsnValAsnGlnLeu 877
Oy 648 CTACTGATATGA-----GCAGTGTGATGCTTACTTAAGATGACGT 692
Db 878 AsnLeuThrAsnGlyHisIleHisLeuAsnAlaGlnAsnAspAlaAsnLys----- 894
Oy 693 GTCTACTAGATATTCACAACATATGACAAGANTGTAGTATACAGTAAAGTGGCG 752
Db 895 -----ValThrThrTyrAsnThr-----LeuThrValAsn 904
Oy 753 GCTGTGGAGAGATTAAAGCAGCCAGAGAGAGTATACCCAGAGTGGAGACACTG 812
Db 905 SerLeuSerGly-----AsnLysSerPhe 912
Oy 813 TACATACCTGCTGATGAGATGATGAATACAAATGCAACCAAGACTGAAT 872
Db 913 TyrTyr-----TrpValAspPheThrAsnAsnLysSerAsn-----LysValValVal 928
Oy 873 AATAAGATGATGTCAACACAGCAAGATGTCTTACACAGAACATCTCGGAGGCTCA 932
Db 929 AsnLys-----SerAlaThrGlyAsn 935
Oy 933 TTTGTGGCTTGATGTCCCAATGCTCCATCTGATCTTCTCCACTGGCCCAATG 992
Db 936 PheThrLeu-----GlnVal 940
Oy 993 ACCGACCTGAAGCGGAATTCACGGGGGACGTTCAT----- 1031
Db 941 AlaAspLysThrGlyLupProAsnHisAsnGlnLeuThrLeuPheAspAlaSerAsnAla 960
Oy 1032 -----AATCTGACTTGGACAGCTCCTGGGATGATTTAGACCAATGAGACCTCAC 1082
Db 961 ThrArgAsnAsnLeuGlnValThrLeuAlaAsnGlySerValAspArgGly-----AlaTrp 979
Oy 1083 AAGTATATCATTCGAATAGTACAAAGTATCTTGTATCTCAGA-----GACAAG 1130
Db 980 LysTyrTrpLysLeuArgAsnValAsnGlyArgTrpAspLeuTyrAsnProGluValGluLys 999
Oy 1131 TTCATGAATCTCTTCAAGGTGAATACTAGTCTCATCCCAAGGAAGCAACTGTAG 1190
Db 1000 ArgAsnGlnThr-----ValAspPheThr 1007
  
```

QY 1191 GAAGCTCTTTTGTAAACAGAAACATCTTTGAAATGCGACAGATCTTTTCATT 1250  
 DB 1008 -----AsnIleThrProAsnAsp----- 1014  
 QY 1251 GCATTTCAGCGCTGTGTATAGTCGATCGATCAAAATATCCAACTTGCACGCTA 1310  
 DB 1015 ---TLeGlnAla---AspAlaProSerAlaGlnSerAsnGlnGluIleAlaGVal 1032  
 QY 1311 TCTTTGTTTATCTCTCCACAGACCTCG-----CCA 1340  
 DB 1033 GlnThrProValProProProAlaProAlaThrGluSerAlaIleAlaSerGluGlnPro 1052  
 QY 1341 GAGACACCTAGTCCTGATGGAACGCTGCTCT 1373  
 DB 1053 GlnThr---ArgProAlaGlnThrAlaGlnPro 1062  
 RESULT 14  
 PCT-US95-10661A-6  
 Sequence 6, Application PC/TUS9510661A  
 GENERAL INFORMATION:  
 APPLICANT: Washington University, et al.  
 TITLE OF INVENTION: Haemophilus Adherence and Penetration protein  
 NUMBER OF SEQUENCES: 9  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Flehr, Hobach, Test, Albritton & Herbert  
 STREET: 4 Embarcadero Center, Suite 3400  
 CITY: San Francisco  
 STATE: California  
 COUNTRY: United States  
 ZIP: 94111-4187  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US95/10661A  
 FILING DATE: 16-AUG-1995  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/296,791  
 FILING DATE: 25-AUG-1994  
 CLASSIFICATION:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Treacartin, Richard F.  
 REGISTRATION NUMBER: 31,801  
 REFERENCE/DOCKET NUMBER: FP-59941/RFT  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 781-1989  
 TELEFAX: (415) 398-3249  
 TELEX: 910 277299  
 INFORMATION FOR SEQ ID NO: 6:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1848 amino acids  
 TYPE: amino acid  
 TOPOLOGY: unknown  
 PCT-US95-10661A-6  
 Alignment Scores:  
 Pred. No.: 0.00753 Length: 1848  
 Score: 117.50 Matches: 123  
 Percent Similarity: 31.94% Conservative: 53  
 Best Local Similarity: 22.32% Mismatches: 186  
 Query Match: 3.87% Indels: 189  
 DB: 5 Gaps: 28  
 US-09-049-696-19 (1-1863) x PCT-US95-10661A-6 (1-1848)  
 QY 3 CAAAGTGTGCGCATCATCAGACAGTCGTTGGGCGCTCTCAGCTCAAGACTAGAG 62  
 DB 607 GlnAspAsnArgSerTyrThrLeuLysLysGlyAlaSerThrArgSerGluLeuPro 626  
 QY 63 GAGCTGTCCAAATGACA-----GAGGTTTACAGACATATGCT 101

DB 627 GlnAsnSerGlyGluSerAsnGlnLysAsnTrpLeuTyrMetGlyArgThrSerAspAlaAla 646  
 QY 102 TCAGATCAAGTTCAGAAC-----AATGCCCTCATGATGCTTT 140  
 DB 647 LysArgAsnValMetAsnHisIleAsnAsnGluArgMetAsnIlyrPheAsnGlyTyrPhe 666  
 QY 141 GGGGCCCTTTCATCAGAAATGAGCTGTCTCAGCGGCTCCATCCAGCTTGAGAGTAAG 200  
 DB 667 Gly-----GluGluGluThrTrpSerAlaThrGlnAsnGlyLysLeuAsnValThrPheAsn 684  
 QY 201 GGAATTAAACCTCCAGAACAGCCAGTGAATGATGACAGATGCTGTG-----GACAGC 254  
 DB 685 GlyLysSerAspGlnAsnArgPheLeuThrGlyGlyThrAsnLeuAsnGlyAspLeu 704  
 QY 255 ACCGTGGGAAGAGACACTTTGTTTATTCACCTCGACACAGCAGCTCCCAAAATCTT 314  
 DB 705 AsnValGlnLysGlyThrPheLeuPheLeuSerGlyArgProThrProHisAlaArgAspIle 724  
 QY 315 CTCTGGGATCCCGAGACAGCAAGGTGCTTGTGA----- 353  
 DB 725 AlaGlyIleSerSerThrLysLysAspProHisPheThrGlnAsnGlnValVal 744  
 QY 354 -----GTGACAAAAACACCAAAATGCGCTACCTCCAAATCCGAGCATGCT 401  
 DB 745 GluAspAspTrpPheAsnArgAsnPheLysAlaThrThrMetAsnValThrGlyAsnAla 764  
 QY 402 AAGGTGGCAGCTTGAAATACAGTCTGCAAGCAAGCTCACAAACCTTGACCCGACTGTC 461  
 DB 765 -----SerLeuTyrSerGlyArgAsnValAlaAsnIleThrSer 777  
 QY 462 ACGTCCCGTGCCTCAAT-----GCTACCGCTGCCTCCAAAT 497  
 DB 778 AsnIleThrAlaSerAsnAsnAlaGlnValHisIleGlyTyrLysThrGlyAspThrVal 797  
 QY 498 ACAGTCACTTCCAA-----ACGAACAAG 521  
 DB 798 CysValArgSerAspTyrThrGlyTyrValThrCysHisAsnSerAsnLeuSerGlnLys 817  
 QY 522 GACACGCAAAATTC-----CCAGCCCTGCTGTTATGCAAAATTTGCCAAGAGGCC 578  
 DB 818 AlaLeuAsnSerPheAsnProThrAsnLeuArgGlyAsnValAsnThrGlnAsnAla 837  
 QY 579 TCCCAATTCCTC-----AGGCGCAGTGTACAGCCCTGATTGAATCAGTGAATGGAANAACA 635  
 DB 838 SerPheThrLeuGlyLysAlaAsnLeuPheGlyThrIleGlnSerIleGlyThrSerGln 857  
 QY 636 GTTACCTTGAA----- 647  
 DB 858 ValAsnLeuLysGlnAsnSerHisTrpHisLeuThrGlyAsnSerAsnValAsnGlnLeu 877  
 QY 648 CTACGTGATAATGGA-----GCAAGTGTGATGCTCTCTAGATGATGACGCT 692  
 DB 878 AsnLeuThrAsnIleHisIleHisLeuAsnAlaGlnAsnAspHisAsnLys----- 894  
 QY 693 GTCTACTCAAGGTATTTCAACACTATGACAGCAAGTGTAGATACAGTGAATAAGTGGCG 752  
 DB 895 -----ValThrThrTyrAsnThr-----LeuThrValAsn 904  
 QY 753 GCTCTGGAGAGACTTAACGACGAGCAGAGAGATGATACCCGACGAGTGGAGCATG 812  
 DB 905 SerLeuSerGly-----AsnGlySerPhe 912  
 QY 813 TACATACCTCGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 872  
 DB 913 TyrTyr-----TrpValAspPheThrAsnAsnLysSerAsn-----LysValValVal 928  
 QY 873 AATAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 932  
 DB 929 AsnLys-----SerAlaThrGlyAsn 935  
 QY 933 TTTGTGGTTCTGANGTCCCAAAATGCTCCCATACCTGATCTCTCCACCTGCCCAATTC 992  
 DB 933 TTTGTGGTTCTGANGTCCCAAAATGCTCCCATACCTGATCTCTCCACCTGCCCAATTC 992

Db 936 PheThrLeu-----GlnVal 940  
 QY 993 ACCGACCTGAAGCGGAATTCACGGGGCAGCTTCATT----- 1031  
 Db 941 AlaAspLysThrGlyLysProAsnHisAsnGlnLeuThrLeuPheAspAlaSerAsnAla 960  
 QY 1032 -----AATCTGACTTGGACAGCTCCCTGGGATGATTATGACCAGGAACAGCTCAG 1082  
 Db 961 ThrArgAsnAsnLeuGlnValThrLeuAlaAsnGlySerValAspArgGly---AlaTrp 979  
 QY 1083 AAGTATATCATTCGAATAGTACAAAGTATCTTGATCTCAGA-----GACAG 1130  
 Db 980 LysTyrLysLeuArgAsnValAsnGlnLysTyrAspLeuTyrAsnProGlnValAlaGlnLys 999  
 QY 1131 TTCATGTAATCTCTCAGTGAATCTACTGCTCTCATCCCAAGAACCCACTCTGAG 1190  
 Db 1000 ArgAsnGlnThr-----ValAspThrThr----- 1007  
 QY 1191 GAAGCTCTTTTGTAAACAGAAACATTACTTTGAAATGCGACAGATCTTTTCATT 1250  
 Db 1008 -----AsnIleThrThrProAsnAsp----- 1014  
 QY 1251 GCTATTCAGCGCTGTGAATAGGCTGATGAAATCAGAAATATCCACATTGACAGAGTA 1310  
 Db 1015 ---IleGlnAla---AspAlaProSerAlaGlnSerAsnAsnGlnGluIleAlaIleArgVal 1032  
 QY 1311 TCTTGTATTCTCCACAGACTCCG----- 1340  
 Db 1033 GlnThrProValProProAlaProAlaThrGlnSerAlaIleAlaSerGlnGlnPro 1052  
 QY 1341 GAGACACCTAGCTGATGAAACGCTGCTCCT 1373  
 Db 1053 GlnThr---ArgProAlaGlnThrAlaGlnPro 1062  
 RESULT 15  
 US-09-041-886-25  
 : Sequence 25, Application US/09041886  
 : Patent No. 6235872  
 : GENERAL INFORMATION:  
 : APPLICANT: Bedesen, Dale E.  
 : APPLICANT: Rabizadeh, Sharroz  
 : TITLE OF INVENTION: Proapoptotic Peptides, Dependence  
 : TITLE OF INVENTION: Polypeptides and Methods of Use  
 : NUMBER OF SEQUENCES: 72  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: Campbell & Flores LLP  
 : STREET: 4370 La Jolla Village Drive, Suite 700  
 : CITY: San Diego  
 : STATE: California  
 : COUNTRY: United States  
 : ZIP: 92122  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: PatentIn Release #1.0, Version #1.25  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/09/041,886  
 : FILING DATE:  
 : CLASSIFICATION:  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: Campbell, Cathryn A.  
 : REGISTRATION NUMBER: 31,815  
 : REFERENCE/DOCKET NUMBER: P-LJ 2626  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: (619) 535-9001  
 : TELEFAX: (619) 535-8949  
 : INFORMATION FOR SEQ ID NO: 25:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 1447 amino acids  
 : TYPE: amino acid  
 : TOPOLOGY: linear  
 : MOLECULE TYPE: protein

US-09-041-886-25  
 Alignment Scores:  
 Pred. No.: 0.0117 Length: 1447  
 Score: 115.00 Matches: 115  
 Percent Similarity: 31.79% Conservative: 64  
 Best Local Similarity: 20.43% Mismatches: 194  
 Query Match: 3.78% Indels: 190  
 DB: 4 Gaps: 26  
 US-09-049-696-19 (1-1683) x US-09-041-886-25 (1-1447)  
 QY 27 GTCGCTTGGGCGCTCTGCACCTCAGACCTCAGAGAGAGAGCTGCCAATGACAGAGAGT 86  
 Db 189 ValValValLeuProSerGlyAlaLeuGlnIleSerAlaGlu-----GlnProGlyAsp 206  
 QY 87 TTACAGCATATGCTTCAGATCAAGTCAAGAACATGCGCTCATGATGATGATGGGCGC 146  
 Db 207 IleGlyIleTyrArg-----CysSerAlaIleArgAsnPro 217  
 QY 147 CTTTCATCAGCAATAGAGCTGTCTCTCAGCGCTCCATCCAGCTTGAGAGTAAAGGATTA 206  
 Db 218 AlaSerSerArgThrGlyAsnGlnValLeuValArgIle---LeuSerAspProGlnLeu 236  
 QY 207 -----ACCTCCAGACAGCGAGTGATGATGAGTGCAGTGATGTCGAGACAGACCGTG 260  
 Db 237 HisArgGlnLeuTyrPheLeuGlnIleArgProSerAsnValAlaIleGlu----- 253  
 QY 261 GGAAGACACTTTGTTCTTATTCACCTGACAGCAGCAGCGCTCCCAATCCTTCTCTGG 320  
 Db 254 GlyLysAspAlaValLeuGlnLysCysValSerGlyTyrProProSerPheThrTrp 273  
 QY 321 GATCCAGTGGACAGACAGAGCTGCTTTGTAGTGCACAAAACCAAAATGGCCTTAC 380  
 Db 274 -----LeuArgIleGlyGlnValIleGlnLeuArgSerLys----- 285  
 QY 381 CTCCAATCCGACGATTTGCTAAGTTGGCACTTGGAAATACAGTCTGCAAGACGTCA 440  
 Db 286 -----LysTyrSerLeuLeuGlyLysSer 293  
 QY 441 CAACCTTGACCTGACGTGTCACGTCCGCGTCCCAATGCTACCTGCTCCAAATTACA 500  
 Db 294 AsnLeuLeuIleSerAsnValThrAsp----- 302  
 QY 501 GTGACTTCCAAAACGAAACAGACACAGCAAAATCCCGACGCTGTGCTAGTTATGCA 560  
 Db 303 -----AspAspSerGlyMetTyrThrCysValValThrTyrLys 315  
 QY 561 AATATTGCGCAAGAGAGCTCCCAATTCACAGGCGCAGTGCACAGCCCTGATTGAA--- 617  
 Db 316 AsnGlnAsnIleSerAlaSer-----AlaGlnLeuThrValLeuValProPro 331  
 QY 617 ----- 617  
 Db 332 TrpPheLeuAsnHisProSerAsnLeuTyrAlaTyrGlnUserMetAspIleGlnPheGlu 351  
 QY 618 ---TCAGTGAATGAAAAACAGT---ACCTTGGAATCTAGTGAATAGCA----- 662  
 Db 352 CysThrValSerGlyLysProValProThrValAsnTrpMetLysAsnGlyAspValVal 371  
 QY 663 -----GCAGTGTGAT-----GCT 677  
 Db 372 IleProSerAspTyrPheGlnIleValIleGlySerAsnLeuAlaGlyIleLeuGlyValVal 391  
 QY 678 ACTAAGATGAGCGGTCTCTCAAGTATTCACAACTTATGACACGAATGGTAGATAC 737  
 Db 392 LysSerAspGlnGlyPheTyrGlnCysValAlaGlnAsnGlnAlaGlyAsnAlaGlnThr 411  
 QY 738 AGTGTAAA-----GTGCGGCTGTGGAGGAGTTAAAGCAGCC 776  
 Db 412 SerAlaGlnLeuIleValProLysProAlaIleProSerSerValLeuProSerAla 431  
 QY 777 AGACGAGAGTGAATACCCAGAGAGTGGAGACGTGACATACCTGCGTGGATTGAGAT 836



GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

## OM protein - nucleic search, using frame\_plus\_p2n model

Run on: October 17, 2002, 18:59:25 ; Search time 58 Seconds  
(without alignments)  
3870.845 Million cell updates/sec

Title: US-09-049-696-41  
Perfect score: 4759  
Sequence: 1 MGFKSSVFILHLLEGAL.....GIHLKIMKIGELQSLA 914

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Delopt 7.0  
Delop 6.0 , Delext 7.0

Searched: 38353 seqs, 122816752 residues  
Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

## Command line parameters:

-MODEL-frame\_p2n\_model -DEV-rlh  
-Q-/cgn2\_1/USFTO.spool/US09049696/runat\_16102002\_120249\_26177/app\_query.fasta\_1.1095  
-DB-Issued\_Patents\_NA -QFMT-fastap -SUFFIX-rn1 -MINMATCH=0.1 -LOOPTCL=0  
-LOOPEXT=0 -UNITS-bits -START=1 -END=1 -MATRIX-blosum62 -TRANS-human40.cdi  
-LIST=45 -DOCALIGN=200 -THR\_SCORE-pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=15  
-MODE-LOCAL -OUTFMT-pto -NOBM-ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-USER=US09049696 -CGN\_1\_1\_22-enumat\_16102002\_120249\_26172 -NCPU=6 -ICPU=3  
-NO\_ALPAY -NO\_MMAP -LARGEQUERY -NEG\_SCORES=0 -WAIT -LONGLOG -DEV-TIMEOUT=120  
-WARN\_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6 -Fgapext=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

## Database :

- Issued Patents\_NA.\*  
1: /cgn2\_6/ptodata/2/1na/5A.COMB.seq.\*  
2: /cgn2\_6/ptodata/2/1na/5B.COMB.seq.\*  
3: /cgn2\_6/ptodata/2/1na/6A.COMB.seq.\*  
4: /cgn2\_6/ptodata/2/1na/6B.COMB.seq.\*  
5: /cgn2\_6/ptodata/2/1na/PCTUS.COMB.seq.\*  
6: /cgn2\_6/ptodata/2/1na/backfillseq.seq.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Query Length	DB ID	Description
1	4756	99.9	3007	4	US-09-193-562D-27
2	2334	49.0	3317	4	US-09-193-562D-1
3	2333	49.0	3022	4	US-09-193-562D-33
4	2262.5	47.5	3418	4	US-09-193-562D-29
5	1998.5	42.0	2970	4	US-09-193-562D-31
6	1347	28.3	878	1	US-08-469-667-8
7	1347	28.3	878	1	US-08-224-110-8
8	1347	28.3	878	5	PCT-US95-07289-8
9	618	13.0	401	4	US-09-221-328-34
10	519	10.9	576	4	US-09-385-982-23
11	468.5	9.8	595	4	US-09-385-982-25
12	447	9.4	618	4	US-09-385-982-24

13	421.5	8.9	611	4	US-09-385-982-27	Sequence 27, Appl
14	373.5	7.8	742	4	US-09-385-982-33	Sequence 33, Appl
15	203	4.3	335	4	US-09-193-562D-14	Sequence 14, Appl
16	143	3.0	7253	4	US-09-268-347-35	Sequence 35, Appl
17	139.5	2.9	4783	2	US-08-617-667-8	Sequence 8, Appl
18	137	2.9	5738	2	US-08-409-995-3	Sequence 3, Appl
19	137	2.9	5738	3	US-08-685-467-3	Sequence 3, Appl
20	137	2.9	7291	4	US-08-913-942-3	Sequence 3, Appl
21	131.5	2.8	4702	1	US-08-038-662-8	Sequence 8, Appl
22	131.5	2.8	4702	1	US-08-302-832-8	Sequence 8, Appl
23	131.5	2.8	4702	2	US-08-530-198-8	Sequence 8, Appl
24	131.5	2.8	4702	2	US-08-469-880-8	Sequence 8, Appl
25	131.5	2.8	4702	2	US-08-728-470-8	Sequence 8, Appl
26	131.5	2.8	4702	2	US-08-719-641-8	Sequence 8, Appl
27	131	2.8	5116	1	US-08-038-662-1	Sequence 1, Appl
28	131	2.8	5116	1	US-08-302-832-1	Sequence 1, Appl
29	131	2.8	5116	2	US-08-530-198-1	Sequence 1, Appl
30	131	2.8	5116	2	US-08-469-880-1	Sequence 1, Appl
31	131	2.8	5116	2	US-08-728-470-1	Sequence 1, Appl
32	131	2.8	5116	2	US-08-617-697-1	Sequence 1, Appl
33	131	2.8	5116	4	US-08-719-641-1	Sequence 1, Appl
34	127	2.7	43804	4	US-09-171-461-1	Sequence 1, Appl
35	123	2.6	16836	4	US-09-147-236-1	Sequence 1, Appl
36	123	2.6	16836	4	US-09-147-236-10	Sequence 10, Appl
37	122.5	2.6	9542	4	US-08-968-685A-9	Sequence 9, Appl
38	122	2.6	9171	1	US-08-038-682-5	Sequence 5, Appl
39	122	2.6	9171	1	US-08-302-832-5	Sequence 5, Appl
40	122	2.6	9171	2	US-08-530-198-5	Sequence 5, Appl
41	122	2.6	9171	2	US-08-469-880-5	Sequence 5, Appl
42	122	2.6	9171	2	US-08-728-470-5	Sequence 5, Appl
43	122	2.6	9171	2	US-08-617-697-5	Sequence 5, Appl
44	122	2.6	9171	4	US-08-719-641-5	Sequence 5, Appl
45	121.5	2.6	2363	4	US-09-721-383-1	Sequence 1, Appl

## ALIGNMENTS

RESULT 1  
US-09-193-562D-27  
Sequence 27, Application US/09193562D  
Patent No. 6309857

GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
FILE REFERENCE: 18617.0052  
CURRENT FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 27  
LENGTH: 3007  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-27

## Alignment Scores:

Pred. No.: 0  
Score: 4756.00  
Percent Similarity: 100.00%  
Best local Similarity: 99.89%  
Query Match: 99.94%  
Length: 3007  
Matches: 913  
Conservative: 1  
Mismatch: 0  
Indels: 0  
Gaps: 0

US-09-049-696-41 (1-914) x US-09-193-562D-27 (1-3007)

Qy 1 MetGlyProPheYsserSeValPheIleuIleuHsIsteuLeuGluYAlaIeu 20  
Db 47 ATGGGCGCATTTAAGAGTCTGTCTTCATCTTGACCTTCACCTTGAAGGGCCCTG 106  
Qy 21 SerAsnSerIeuIleuIleuAsnAsnGlyTyrGluGlyIleValAlaIleAsp 40

Db 107 AGTAATTCATCTATTCAGCTGGAACAACAATGGCTATGAAGGCACTGCTGTCATTCAGAC 166  
QY 41 ProAsnVal1ProGluAspGluThrLeuIleGlnIleLeuAspMetValThrGlnAla 60  
Db 167 CCCAATGTCGCGAAGATGAAGACATCTCATTTCAACAATTAAGAGACATGGTGACCCGAGCA 226  
QY 61 SerLeuThrLeuPheGluAlaThrGlyLeuAspPheThrPheLeuAsnValAlaIleLeu 80  
Db 227 TCTCTGTATCTGTTGAACCTACAGAAAGCCGATTTATTTTCAAAAATGTTGGCATTG 286  
QY 81 IleProGluThrThrLysThrLysAlaAspTyrValArgProLysLeuIleuThrTyrLys 100  
Db 287 ATTCTGAAACATGGAAGACAAAGGCTGACTATGTAGACCAAACTTAGACCTTCAAA 346  
QY 101 AsnAlaAspValLeuValAlaGluSerThrProGluYAsnAspGluProTyrThrGlu 120  
Db 347 AATGCTGATGTTCTGGTCTGCTGAGTCTACTCTCCAGAGTAATATGAACCTTACCTGAG 406  
QY 121 GlnMetGlyAsnGlyGlyLeuLysGlyIleuArgIleHisLeuThrProAspPheIleAla 140  
Db 407 CAGATGGCACTGTGGAGAGAAGGGTGAAGGATCCACCTCCTGATTTCAATTGCA 466  
QY 141 GlyLysLysLeuAlaGluTyrGlyProGlnIleArgAlaPheValHisGluThrAlaHis 160  
Db 467 GGAATAAATTAAGCTTAATATGGACCAAGGATGGCATTTGTCATGAGTGGCTCAT 526  
QY 161 LeuArgTyrGlyValPheAspGluTyrAsnAsnAspGluLysPheTyrLeuSerAsnGly 180  
Db 527 CTACGATGGGAGATATTGACGAGTACAAATATGATGAGAAATTTCACTTATCCATGGA 586  
QY 181 ArgIleGlnAlaValAlaArgGlySerAlaGlyIleThrGlyThrAsnValValLysLysCys 200  
Db 587 ACAATAACAAGCATGAAGTTCAGACAGATATTACGTGACAAATGTAGTAAAGAGTGT 646  
QY 201 GlnGlyLysSerCysTyrThrLysArgCysThrPheAsnLysValThrGlyLeuTyrGlu 220  
Db 647 CAGGAGGACGCTGTACACCAAAAGATGACACTTAATTAAGTTACAGAGACTCTATGGA 706  
QY 221 LysGlyCysGluPheValLeuGlnSerArgGlnThrGluLysAlaSerIleMetPheAla 240  
Db 707 AAGAGATGTGAGTTGTCTCCAAATCCCGCAGACGAGCAAGGCTCTATTAATGTTGGA 766  
QY 241 GlnHisValAspSerIleValGluPheCysThrGluGlnAsnHisAsnLysGluAlaPro 260  
Db 767 CAACATGTTGATTCATATGATTGATTTCTGTACAGAAACAACCAACAAGAGAGTCCA 826  
QY 261 AsnLysGlnAsnGluLysCysAsnLeuArgSerThrTyrGluValIleArgAspSerGlu 280  
Db 827 AACAAACCAAAATCCAAAATGCAATCTCCAGACACATGGGAAGTATCCGTGATTTGAG 886  
QY 281 AspPheLysLysThrThrProMetThrThrGlnProProAsnProThrPheSerLeuLeu 300  
Db 887 GACTTTAAGAAAACCACTCTATGACACACAGCCAAATCCCACTTCATGTCGCG 946  
QY 301 GlnIleGlyGlnArgIleValCysLeuValLeuAspLysSerGlySerMetAlaThrGly 320  
Db 947 CAGATTGGCAAGAATTTGTGTGTAGTCTTGACAAATCTGGAAGCAATGGGAGCTGCT 1006  
QY 321 AsnArgLeuAsnArgLeuAsnGlnAlaGlyGlnLeuPheLeuLeuGlnThrValGluLeu 340  
Db 1007 AACCCGCTAAATCGACTGATCAAGCAGGCCACTTTTCTGCTGGAGACAGTGGAGCTG 1066  
QY 341 GlySerTyrValGlyMetValThrPheAspSerAlaAlaHisValGlnSerGluLeuIle 360  
Db 1067 GGGTCTCTGGGTTGGGATGGTGAATTTGACAGTGGCGCCCATGTACAAGTGAACCTCA 1126  
QY 361 GlnIleAsnSerGlySerAspArgAspThrLeuAlaLysArgLeuProAlaAlaSer 380  
Db 1127 CAGATTAACAGAGGAGTACAGGAGCACACTGCCAAAAGATTACTGCACAGACCTCA 1186  
QY 381 GlyGlyThrSerIleCysSerGlyLeuArgSerAlaPheThrValIleArgLysLysTyr 400  
Db 1187 GAGGGAGACCTCATCTGACGGGGCTTGATGGCATTTACTGTGATTAGGAAGAAATAT 1246

QY 401 ProThrAspGlySerGluIleValLeuLeuThrAspGlyGluAspAsnThrIleSerGly 420  
Db 1247 CCACATGATGATCTTAATAATTGGCTGCTGACGAGATGGGAGACACAACATATAAGTGG 1306  
QY 421 CysPheAsnGluValLysGlnSerGlyAlaIleIleHisThrValAlaLeuGlyProSer 440  
Db 1307 TGCCTTAACGAGGTCAAAACAAAGTGCTGCCATCATCACACAGTCCGTTGGGGCCCTCT 1366  
QY 441 AlaAlaGlnGluLeuGluLeuSerLysMetThrGlyLeuGlnThrTyrAlaSer 460  
Db 1367 GCAGCTCAAGAACTTAGAGAGCTGTCCAAAATGACAGAGGTTTACAGACATATGCTTCA 1426  
QY 461 AspGlnValGlnAsnAsnGlyLeuIleAspAlaPheGlyAlaLeuSerSerGlyAsnGly 480  
Db 1427 GATCAAGTTCAAGACAAATGGCTCATATGCTTTGGGGCCCTTTCATCAGGAATGGA 1486  
QY 481 AlaValSerGlnArgSerIleGlnLeuGluSerLysGlyLeuThrLeuGlnAsnSerGln 500  
Db 1487 GCTGTCTTCAGCGCTCCATCCAGCTTGAGAGTAAAGGATTAACCTCCGAAACAGCCAG 1546  
QY 501 TyrMetAsnGlyThrValIleValAspSerThrValGlyLysAspThrLeuPheLeuIle 520  
Db 1547 TGGATAAATGGCACAGTGAATCGTGACACACCGTGGAAGAGCACTTGTTCATTATC 1606  
QY 521 ThrTyrThrThrGlnProProGlnIleLeuLeuTyrAspProSerGlyGlnLysGlnGly 540  
Db 1607 ACTGGACAACGAGGCTCCCAAAATCTTCTCTGGATCCCAAGTGACAGAAAGCAAGGT 1666  
QY 541 GlyPheValValAspLysAsnThrLysMetAlaTyrLeuGlnIleProGlyIleAlaLys 560  
Db 1667 GCGTTGTGTGTGACAAAAACCAAAATGGCCCTTACCTCAATCCAGCATTTGCTAAG 1726  
QY 561 ValGlyThrTyrLysTyrSerLeuGlnAlaSerSerGlnThrLeuThrLeuThrValThr 580  
Db 1727 GTTGGGACTTGAATAATACGATCTGCAAGCAAGCTCAAAACCTTGACCTGACTGTCAG 1786  
QY 581 SerArgAlaSerAsnAlaThrLeuProProIleThrValThrSerLysThrAsnLysAsp 600  
Db 1787 TCCCGTGGCTCAATGCTTACCTGCTCAATTAACAGTACTCCAAACGAACAGAGAC 1846  
QY 601 ThrSerLysPheProSerProLeuValValTyrAlaAsnIleArgGlnLysAlaSerPro 620  
Db 1847 ACCAGCAAAATTCGCCAGCTCTGTGTATGCAAAATTCGCCAAGAGACCTCCCA 1906  
QY 621 IleLeuArgAlaSerValThrAlaLeuIleGluSerValAsnGlyLysThrValThrLeu 640  
Db 1907 ATTCTCAGGGCCAGTGTCAAGCCCTGATTTGAATCAGTAATGGAAGAAACAGTTACTTG 1966  
QY 641 GluLeuLeuAspAsnGlyValaGlyAlaAspAlaThrLysAspAspGlyValTyrSerArg 660  
Db 1967 GAACACTGATGAATATGACAGAGTGTGATGCTACTAAGAGATGACGGTGTACTACCAAG 2026  
QY 661 TyrPheThrThrTyrAspThrAsnGlyArgTyrSerValLysValArgAlaLeuGlyGly 680  
Db 2027 TATTTTCACAACATTATGACGGAATGGTATACAGATGAAGATGGGGCTCTGGAGGA 2086  
QY 681 ValAsnAlaAlaArgArgArgValIleProGlnGlnSerGlyAlaLeuTyrIleProGly 700  
Db 2087 GTTAAACGACGCCAGACGGAGAGTGAATACCCACAGAGTGGAGCACTGTACTACTGGC 2146  
QY 701 TrpIleGluAsnAspGluIleGlnTyrAsnProProArgProGluIleAsnLysAspAsp 720  
Db 2147 TGGATTGAAATGATGAATATACAAATGGAATCCACCAAGACCTGAATTAAGATGAT 2206  
QY 721 ValGlnHisLysGlnValCysPheSerArgThrSerSerGlyLysPheValAlaSer 740  
Db 2207 GTTCAACACAACAAGATGTGTTCAGAGAAACATCTCCGGAGGCTCATATTTGTGGCTCT 2266  
QY 741 AspValProAsnAlaProIleProAspLeuPheProProGlyGlnIleThrAspLeuLys 760  
Db 2267 GATGTCCCAAAATGTCCATACCTGATCTTCCACCACTGGCCAAATACGACCACTGAAG 2326



RESULT 2  
US-09-193-562D-1

```

: Sequence 1, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedict U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193,562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 1

```

LENGTH: 3317

TYPE: DNA

ORGANISM: Unknown  
FEATURE:

; OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated  
 ; OTHER INFORMATION: protein from bovine endothelial cells  
 US-09-193-562D-1

**Alignment Scores:**

Pred. No.:	9.5e-233	Length:	3317
Score:	2334.00	Matches:	466
Percent Similarity:	69.95%	Conservative:	144
Best Local Similarity:	53.44%	Mismatches:	246
Query Match:	49.04%	Indels:	16
DB:	4	Gaps:	11

US-09-049-696-41 (1-914) x US-09-193-562D-1 (1-3317)

```

0y      8 ValPheIleuIleuHIsIeuIeuIuAlaIeuSerIeuIeuIeuIeu 27
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      84 ATTCGTCCTCCAACTTCGATCTCTGCGCTGAA---ATGAAAGATCTAATGTAATTTC 144
Oy      28 AsnAsnAsnGlyTYrGluGlyYlleValAlaIleAspProAsnValProGluAspGlu 47
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db      141 ATTAAACAATGGGTAGAGGCAATTCCTCAATTAACCCCAAGTGTCCCGAAGATGAA 200

```

OY	48	ThrlleuilelgnlgnllelylsasphetvalThhlnalaserleuTyLeupheglua	67
Db	201	AAATCTATTGAAACATMAAGAAAGTGTAAAGACCTTACTTACTGTTTATCC	260
OY	68	ThrclylsasrphetryrphelysasnvalAlalelellelprogluthThrlypsThr	87
Db	261	ACCAAGCAAGAGATTATTTTCAGGAATGTGAGCATTTTAATTCAGATGACCTGGAAATCA	320
OY	88	LyalslaaspyrValAlarprolylsleugluthThrTyLyasaalAaspyrAlleuvala	107
Db	321	AAATCTGAGTACTTCATACCAAAACAAAGATCATATGACACGAGATGTCTACTTCT	380
OY	108	GluserThrProprogllyasnaspgluProTyThrGlulmetelyAsmcysglu	127
Db	381	AATCCCTATCTAAATATGTGAGATGTATCCCTATATCACTTCAATATGAGGTGGAGAA	440
OY	128	LyslglulnargllehlsleuthrProasphelAlealgllylsleuAlelufr	147
Db	441	AAAGAAAAATATATACATTTTACTCCAAACCTTGTGACTAATATTTCCACATCTAT	500
OY	148	GlyProglunargAlaPheValhlsGluTPRALhlsleuArgTrpLyValPheas	167
Db	501	GGGTCCCGAGGCACAGATATTTGTCCATGATGGGCCCATCTCGCTGGGGATATTGAT	560
OY	168	GlutyrAsnasnaspglulsphetryrLeuser--AsnGlyArgllelnAlaValArg	186
Db	561	GAGTATATGTGGCCAGCCATTCATATTTTCGAGAAACACATATGGAACCAACAGA	620
OY	187	CysSerAlaGlyIleThrnglyThrAsnVal--LysLysCysGlnGlyLysCys	205
Db	621	TGTTCAACTCATATTTACTGGTATTAATGTGGTTCACAAATAAGCCCTGGAGGACGTGT	680
OY	206	TyrThrLysArgCysThrPheasnlYsValThrGlyLeuTyrglulysGlyCysgluPhe	225
Db	661	ATAACAAGTGTATGACAGCTGACTCAGACAGAGGGCTGTATGAAGCAAAAGTACATTC	740
OY	226	ValleuglnSerArglnThrGlyLysAlaSerIleMetPheAlaGlnhlsValAspSer	245
Db	741	CTTCCAAAATAATCCGAGCTGCAGAAAGATCATTTATGTATGCAAGTCTCCATCT	800
OY	246	IleValGluPheCysThrGlnGlnAsnHisAsnLysGluAlaProAsnLysGlnAsnGln	265
Db	801	GTGACTGATTTGTATACAGAAAAACACACAAATACGAAGCTCCAAACCTACAAAACAA	860
OY	266	LysCysAsnLeuArgSerThrTrpGluValIleArgAspSerGluAspPheLysThr	285
Db	861	ATGTGCATGSCAAAACACACATGGAGTATATCATGAACCTGTTGACTTCAGAAATCA	920
OY	286	ThrProMetThr----ThrGlnProProAsnProThrPheSerLeuLgnlleGly	303
Db	921	TCTCCCATGACAGAAATGAATCCACGACATCCATCACTTTCATTTGCTCAAGTCGCAAA	980
OY	304	GlnArgIleValCysLeuValleuAspLysSerGlySerMetAlaThhGlyAsnArgLeu	323
Db	961	CAGGGGTAGTCTGTTGTGACTTGTATTAATCTGGAAAGCATGTCTGCAGAGACCGTCTC	1040
OY	324	AsnArgLeuAsnGlnAlaGlnleuPheleuLgnlleThrValGluLeuGlySerTrp	343
Db	1041	TTTCAAAATGAATCAACGACAGCAACTATACTTATTCAGATTATGAAAAGGACTTTTA	1100
OY	344	ValGlyMetValThrPheAspSerAlaAlaHisValGlnSerGluLeuIleGlnIleAsn	363
Db	1101	GTTGGGATGTGTACATTTTGACAGTGTGTGAATCCAAAATCACTTAAACAAGATTAAT	1160
OY	364	SerGlySerAspArgAspThrIleuAlaLysArgLeuProAlaAlaSerGlyGlyThr	383
Db	1161	GATGATATATGTTTACCAAAAGATCACCGGCAAAATCTCTCAAGTACGTATGTGGAACT	1220
OY	384	SerIleCysSerGlyLeuArgSerAlaPhe--ThrValIleArgLysLysTrpProThr	402
Db	1221	TCAATTTGTAGAGGGCTCAAAAGCAGAGTTCACGCAATTAATCCACAGTACACAGAGTACT	1280
OY	403	AspGlySerGluIleValIleLeuLeuThrAspGlyGluAspAsnThrIleSerGlyCysPhe	422

```

Db 1291 TCTGGTTTCGAATCATACTATTAACTGATGGGAAGATAAGAAATAATCATACCTTT 1340
Oy 423 AsnGlyValSerGlyValAlaIleHisThrValAlaLeuGlyProSerAlaIle 442
Db 1341 GAGGATGTAAGAAAGAAAGTGTGATCATCCACCATTCCTCTGGAGCCCTCTGCTGCC 1400
Oy 443 GluGluLeuGluLeuSerLysMetThrGlyGlyLeuGluThrTyrAlaSerAspGln 462
Db 1401 AAAGAACTGGAGACATGTCCTCAATATGACAGAGGATATGCTTTTTCCTCAATAAGAC 1460
Oy 463 ValGlnAsnAsnGlyLeuLeuLeuAlaPheGlyAlaLeuSerSerGlyGlnGlyAlaVal 482
Db 1461 ATA-----ACTGGCCCTTACTATGCTTCACTAGTAGAATTTCATGAGAAGTGGAAACATC 1514
Oy 483 SerGlnAsnSerLleGluLeuGluSerLysGlyLeuThrLeuGlnAsnSerGlnTrpMet 502
Db 1515 ACTCGACGAGGCTATTCAGTGTGGAAAGCAAGCCTTGAAATTCACAGGAAGAAAGAGATA 1574
Oy 503 AsnGlyThrValIleValAlaSerThrValGlyLysAspThrLeuPheLeuIleThrTrp 522
Db 1575 AAGGACAGAGTCCCTGATGACAGTACAGTATGGAATGACACTTCTTGTGTGCACATGG 1634
Oy 523 ThrThrGlnProPheGlnIleLeuLeuTrpAspProSerGlyGln-----LysGlnGly 540
Db 1635 ACAATATCAAAAAACAGAAATTTGCTCCAAAGATCCAAAAGAAAGAAATATATAAACCTCG 1694
Oy 541 GlyPheValAlaLysLysLys-----AsnThrLysMetAlaTyrLeuGlnIleProGlyIleAla 559
Db 1695 GATTTCAAAAGAAAGATTAATTAATATGATCTGCTCGCTCAATACCTGATTTGCA 1754
Oy 560 LysValGlyThrTrpLysTyrSerLeu-----GlnAlaSerSerGlnThrLeuThr 576
Db 1755 GAGACAGGACTTGGACTTACAGCCTTAAATATCATGATCCAGGCTCCAAATGCTAACA 1814
Oy 577 LeuThrValThrSerArgAlaSerAsnAlaThrLeuProPheIleThrValThrSerLys 596
Db 1815 GTGACAGTGCACCTGACAGCAAGAAAGTCTACTATACCCCGATATTGCCAAGCTCAC 1874
Oy 597 ThrAsnLysAspThrSerLysPheProSerProLeuValTyrAlaAsnIleArgGln 616
Db 1875 ATGACTCAACATACAGCAATATATCTAGCCCAATGATTTTATGACAACTGACTCA 1934
Oy 617 GlyAlaSerProIleLeuArgAlaSerValThrAlaLeuIleGluSerValAsnGlyLys 636
Db 1935 GGGTTTTCCTGCTGATGGGAATCATGTAATAGCCATTAATGAAACGAAATGACAT 1994
Oy 637 ThrValThrLeuGluLeuLeuAsnGlnGlyAlaGlyAlaAspAlaThrLysAspGly 656
Db 1995 CAAGTATCACTTGGACTCTGGGACATGCTGAGTCTGATACCTGCAAGATGATGTC 2054
Oy 657 ValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyArgTyrSerValIleValArg 676
Db 2055 ATCTACTCAAGATTAATTAACATTAATCTATGGAATGTAAGTATGATTAAGTAAAGTACAT 2114
Oy 677 AlaLeuGlyGlyValAlaAsnAlaAlaArgArgValIleProGluGlnSerGlyAlaLeu 696
Db 2115 GCACAGGCAAGAAACAGGCTAGGCTAATTAATTAAGACACACAGAACAAAGTTCTA 2174
Oy 697 TyrIleProGlyTrpIleGluLeuAsnGlnIleGlnTrpAsnProProArgProGluIle 716
Db 2175 TATGTTTCCAGGCTAGCTGTAAGAAACGTAATTAATTAATTAATTAATTAATTAATTAAT 2234
Oy 717 AsnLysAspAspValAlaHisLysGlnValLysPheSerArgTyrSerSerGlyLysSer 736
Db 2235 AAAGATGACCTGCAAAAGCTAAATATAGAACTTTAGAGACTTAACCTCTGAGAGGTCA 2294
Oy 737 PheValAlaSerAspVal---ProAsnAlaProIleProAsnLeuPheProProGlyGln 755
Db 2295 TTTACTGATATGAGAGCTCTCTCTCTGATATCACCTTCTGTGTTCCACCCAGTAA 2354
Oy 756 IleThrAspLeuLysAlaGluIleHisGlyGlySerLeuLeuAsnLeuThrTrpThrGln 775

```

```

Db 2355 ATTACAGATCTTGAGGCTAAGTTCAAA---GAAGATTATATTCACCTTTCATGGACAGCC 2411
Oy 776 ProGlyAspAspTyrAspHisGlyThrAlaHisLysTyrIleLeuArgLysThrSer 795
Db 2412 CCTGGCAATGCTCTAGATTAAGAAAGCAAGCAGCTATTAATTAAGTAAAGTACAT 2471
Oy 796 IleLeuAspLeuArgAspLysPheAsnGluSerLeuGlnValAsnThrAlaLeuIle 815
Db 2472 TTCATGATATGTCACAGAAAGATTTTTCACATGCGACTTGTGATTAATCTTAATTAATA 2531
Oy 816 ProLysGluAlaAsnSerGlnIleValAlaPheLeuPheLysProGluAsnThrPheGlu 835
Db 2532 CCTAAGAGAGCGGATCAAGAAAGAAATTTTGAATTTTAACCCGAAACATTTTAGAGTAGAA 2591
Oy 836 AsnGlyThrAspLeuPheIleAlaIleGlnAlaValAspLysValAspLeuLysSerGln 855
Db 2592 AATGGACCAAAATTCATATTTTCAGTCCAAAGCATCAAGAACCAATCTCATTCAGAG 2651
Oy 856 IleSerAsnIleAlaArgValSerLeuPheIlePro 867
Db 2652 GTTTCACATTTGTACAAAGCAATCAAAATTTATTCCT 2687

RESULT 3
US-09-193-562D-33
; Sequence 33, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT FILING DATE: US/09/193,562D
; PRIOR APPLICATION NUMBER: 1998-11-17
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 33
; LENGTH: 3022
; TYPE: DNA
; ORGANISM: Mus musculus
US-09-193-562D-33

Alignment Scores:
Pred. No.: 1,03e-232 Length: 3022
Score: 2333.00 Matches: 482
Percent Similarity: 67.42% Conservative: 143
Best Local Similarity: 52.00% Mismatches: 258
Query Match: 49.02% Indels: 44
DB: Gaps: 16

US-09-049-696-41 (1-914) x US-09-193-562D-33 (1-3022)
Oy 1 MetGlyProPheLysSerSerValPheIleLeuIleHisLeuGluGlyAlaLeu 20
Db 18 ATGTGTCAGGCGCTGCAGGCTCTTCTGTTCCCTACCTCTCATCTCGGAGAACACA--- 74
Oy 21 SerAsnSerLleGluLeuAsnAsnAsnGlyTyrGluGlyIleValValAlaIleAsp 40
Db 75 GAGACTCATGATGTCATCTCAACAGCAATGATACGAGAGGTGTCATTCCTCAATTAC 134
Oy 41 ProAsnValProGluLysPheIleLeuIleGlnIleLysAspMetValThrGlnAla 60
Db 135 CCCAGTGTCCAGAGACCAAGAGCTCAATCCACAGCTTAAGAAATGTTACTCAAGCT 194
Oy 61 SerLeuTyrLeuPheGluAlaThrGlyLysArgPheTyrPheLysAsnValAlaIleLeu 80
Db 195 TCTACTTACCTGTTTGAAGCCAGCAAGAGAGATTATTTAAGAACTTAAGCAATATTA 254
Oy 81 IleProGluThrTrpLysThrLysAlaAspTyrValAlaArgProLysLeuGluThrTyrLys 100
Db 255 GTCCCGATGACCTGGAAGCGAAATCTGATGACTTAATGCCAAAGCAAGATCTACGAC 314
Oy 101 AsnAlaAspValLeuValAlaGluSerThrProProGlyAsnAspGluProTyrThrGln 120

```

Dd	1335	TTCTATGCCAACAAGACCTTA-----AACAGCCTTATGATGCTTTCTAGTAGAATTTC	1448b
Qy	477	SerGlnysnglIaValSerGlnArgSerIleGlnLeuGlnSerIysGlyLeuThrLeu	496
Dd	1449	TTCTACAGTGGCACCGTCTCCACGACAGCGCTCTGACTTTGGAGGACGACCTTGATGTC	1508b
Qy	497	GlnAsnSerGlnTrpMetAsnGlyThrValIleValAspSerThrValGlyLysAspThr	516
Dd	1509	AGACAGGCGGATGATTAACCGGACAGTACCTCTGGACAGTACCGTGGCCMACGACAG	1568b
Qy	517	LeuPheLeuIleThrTrpThrGlnProProGlnIleLeuLeuTrpAspProSerGly	536
Dd	1569	TTCTTGTATTACCTCGGATGTGTAATAAACCCGGAATATCTTCATAATCAAAAGGA	1628b
Qy	537	GlnIys-----GlnGlyGlyPheValValAspLys---AsnThrLysMetAlaTrpLeu	553
Dd	1629	AAAAAATATACAACTCAGATTTCCAAAGATGATTAACATAACATCCGCGTCTGACTT	1688b
Qy	554	GlnIleProGlyIleAlaLysValGlyThrTrpLysTrpSerLeuGlnAlaSer---Ser	572
Dd	1689	CAAAATACGGGCACTGCAGAGACAGGACTTGGACTTACAGCTACACGGGATCCAAAGTC	1748b
Qy	573	GlnThrLeuThrLeuThrValThrSerArgAlaSerAsnAlaThrLeuProProIleThr	592
Dd	1749	CAGTGTATTACAAAGACAGACACCTCGGCAAGAAGCCCAACATGGAACACTCTGTG	1808b
Qy	593	ValThrSerLysThrAsnLysAspThrSerLysPheProSerProleuValValTyrAla	612
Dd	1809	GGCTACTCGCTACATGATCTCAGACACAGCCCACTACCTACCGGATGATTTGTACCCA	1868b
Qy	613	AsnIleArgGlnGlyAlaSerProIleLeuArgAlaSerValThrAlaLeuIleGlnSer	632
Dd	1869	CGGGCACGCCAAGGATTTTGGCTGTCTGGAGCCAAATGTCACAGCCCTCATAGAACT	1928b
Qy	633	ValAsnGlyLysThrValThrLeuGlnLeuLeuAsnGlyAlaGlyAlaAspAlaThr	652
Dd	1929	GAACTACGACACTCAAGACACCTTGGAGCTCTGGGCAAAAGGGGCGATCTGATTCGTT	1988b
Qy	653	LysAspAspGlyValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyValTrpTrpSer	672
Dd	1989	AAAAATGATGGCATCTACACAACTACTTTACGATTTATCATCGAAATGCTGATACAGC	2048b
Qy	673	ValLysValArgAlaLeuGlyGlyValAsnAlaAlaArgArgVal-----Ile	689
Dd	2049	CTAAAGAGCGCT-----GTCCAGGCGCAAGAAGAAACAAACAGACTGAGCTTA	2096b
Qy	680	ProGlnGlnSerGlyAlaLeuTyrIleProGlyTrpIleGlnAsnAspGlnIleGlnTrp	709
Dd	2097	AGACAGAAAGAACAGTCTTTATATATACCGCTGATGTGAAATTAAGTAAATTTACTGC	2156b
Qy	710	AsnProProArgProGlnIleAsnLysAspAspValGlnIleLysGlnValCysPheSer	729
Dd	2157	AATCCACCCACCAACAGATGTCACAGAGAACCCATGAAAGCTACAGTGGAACTTCAC	2216b
Qy	730	ArgThrSerSerGlySerPheValAlaSerAspValProAsnAlaProIleProAsp	749
Dd	2217	AGAGTAACCTCTGGAGGGCTGTTACTGTGTCGAGGCCCC-----CCTGAT	2264b
Qy	750	-----LeuPheProProGlyGlnIleThrAspLeuLysAlaGlnIleHis	764
Dd	2265	GGCGACACACGCTCTGCTGCCACCAAGTAAGTCCACAGACCTGGAGCTGAGTTTATA	2324b
Qy	765	GlyGlySerLeuIleAsnLeuThrTrpThrAlaProGlyAspAspTrpAspHisGlyThr	784
Dd	2325	---GGTGATTATATCTACCTTACATGGACGGCCCTGGAGAGGTTCTGCACAAATGGAAGA	2381b
Qy	785	AlaHisLysTrpIleIleArgIleSerThrSerIleLeuAspLeuArgAspLysPheAsn	804
Dd	2382	GCACATATGATACATCAATCAAGATGACGACGACATCCCTGATCTCCAGAAATTTTAAAC	2441b
Qy	805	GlnSerLeuGlnValAsnThrThrAlaLeuIleProLysGlnAlaAsnSerGlnGlnVal	824
Dd	2442	AATCTACTTATGATGCTCTCCACTGTGATTCCTTAAGAAGAGCTGGCTCAAAAGACCA	2501b



QY 461 AspGlnValGlnAsnGlyLeuIleAspAlaPheGlyAlaLeuSerSerGlyAsnGly 480  
 Db 1465 AAAAACAATA-----AATGGCCTTATGATGCTTTCACGACAAATTTATCTAGAAAGTGGC 1518  
 QY 481 AlaValSerGlnArgSerIleGlnLeuGlySerGlyLeuThrLeuGlnAsnSerGln 500  
 Db 1519 AGCATCTCTGACGAGCTCTTCACTGTAAGTAACCTTGAATATCCCGACGACAA 1578  
 QY 501 TrpMetAsnGlyThrValIleValAspSerThrValGlyAspThrLeuPheLeuIle 520  
 Db 1579 TGGATTAATGATGACAGCTCTGTGGATGTAACAGTAAGTAATGACTTCTCTTGTGTC 1638  
 QY 521 ThrTrpThrGlnProGlnIleLeuLeuTrpAspProSerGlyGlnIle----- 538  
 Db 1639 ACATGGACGATACAAAGCCGACCAATATCTTCAAGTCCAAAGCAAAAAATATACT 1698  
 QY 539 -----GlnGlyGlyPheValValAspLysAsnThrLysMetAlaTrpLeuGln 554  
 Db 1699 ACCTCAGATTTTCAAGAGGT-----GACTAATAATTCGCTCGCCGCTTCGA 1749  
 QY 555 IleProGlyIleAlaLysValGlyThrTrpLysTrpSerLeuGln-----AlaSer 571  
 Db 1750 ATACCAAGTATGCGAGACAGGACCTTGACCTTACAGCCTTCAAAACAATCATACCAA 1809  
 QY 572 SerGlnThrLeuThrLeuThrValThrSerArgAlaSerAsnAlaThrLeuProProIle 591  
 Db 1810 TCTCAATGTGTAAGTACGACATACATCCACCTCGACCAAGAACCCCTACACACCTCCAGTA 1869  
 QY 592 ThrValThrSerLysThrAsnLysAspThrSerLysPheProSerProLeuValValTyr 611  
 Db 1870 ATTGCAACTCTCATCATGATGATCAAAATATACAGCTCATACCTTACCCACAGTATGTTAT 1929  
 QY 612 AlaAsnIleArgGlnGlyAlaSerProIleLeuArgAlaSerValThrAlaLeuIleGln 631  
 Db 1930 GCATGTGTCATGCAAGGGTTCTTCTGCTCGGAATCAATGTAACAGCATTATGAA 1989  
 QY 632 SerValAsnGlyLysThrValThrLeuGlnLeuLeuAspAsnGlyAlaGlyAlaAspAla 651  
 Db 1990 AATGTAAGAGGACATCAAGTAACATTGAGACTCTGCGACAAATGGCGACAGTGCATTTCT 2049  
 QY 652 ThrLysAspAspGlyValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyArgTyr 671  
 Db 2050 GTCAGAAATGATGCACTACTCAAGGTATTTTACATGATTACATGAAAGTAGTAGATAC 2109  
 QY 672 SerValLysValArgAlaLeuGlyGlyValAsnAlaAlaArgArgValIleProGln 691  
 Db 2110 AGTTTAAAGTCTTACCACGACGCAAGAAACACACACT-----AGCTAAGTCAACAA 2163  
 QY 692 GlnSerGlyAlaLeuTyrIleProGlyTyrIleGlnAsnAspGlyIleGlnTrpAsnPro 711  
 Db 2164 CAGAAATAAGCTCTGTTGATGACCCGCTATGCTGTAATAATGAAAAATATATCTAACCCA 2223  
 QY 712 ProArgProGlnIleAsnLysAspAspValGlnHisLysGlnVal---CysPheSerArg 730  
 Db 2224 TCCAAACCTGAGACACA---GATGATGTGAAGAGACTCAACAGACAGACTTCACAGA 2280  
 QY 731 ThrSerSerGlyLysSerPheValAlaSerAspVal---ProAsnAlaProIleProAsp 749  
 Db 2281 CTCACCTCTGAGGGTGTGTTACTGTAATCAGAGAGTGCCTTAATGTAATCATCTCAG 2340  
 QY 750 LeuPheProGlyGlnIleThrAspLeuLysIleGlnIleHisGlySerLeuIle 769  
 Db 2341 GTGTTCTACCTGTAATAATTGTAGACCTGAGGCTTAAGTTTCAAGAGATCAT---ATT 2397  
 QY 770 AsnLeuThrTrpThrAlaProGlyAspAspTyrAspHisGlyThrAlaHisLysTyrIle 789  
 Db 2398 CAACCTTCATGAGACTGCCCTGCGAAGTCTCGATTAAGAGAGAGAGAGCTACATT 2457  
 QY 790 IleArgLysSerThrSerIleLeuAspLeuArgAspLysPheAsnGlnSerLeuGlnVal 809  
 Db 2458 ATAGAATTAAGTAACAATTTCTCGACCTCCAGAAAGATTTTGAATAAGCTGCTTTATA 2517

QY 810 AsnThrThrAlaLeuIleProLysGlyAlaAsnSerGlnGlyValIlePheLeuPheLysPro 829  
 Db 2518 AATACTCTGTGTCGATACCTTAAGAGCCGTGCTCAGTAAGAAATTTTGAATTAACCA 2577  
 QY 830 GlnAsnIleThrPheGlnAsnGlyThrAspLeuPheIleAlaIleGlnAlaValAspLys 849  
 Db 2578 GAACCTTCTAATAATAGAGAAATGATGACGACATCTATATTGCAATTCAGACCATCAGCAA 2637  
 QY 850 ValAspLeuLysSerGlnIleSerAsnIleAlaArgValSerLeuPheIleProGln 869  
 Db 2638 GCCAATGTCACCTCAGAGGTTTCAAAACATTCGACAGCAACTAATTTATTCCTCACAG 2697  
 QY 870 ThrPro 871  
 Db 2698 GAACCC 2703  
 RESULT 5  
 US-09-193-562D-31  
 ; Sequence 31, Application US/09193562D  
 ; Patent No. 6309857  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Pauli, Benedicht U.  
 ; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 ; ; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 ; FILE REFERENCE: 18617.0052  
 ; CURRENT APPLICATION NUMBER: US/09/193,562D  
 ; PRIOR FILING DATE: 1998-11-17  
 ; PRIORITY DATE: 1997-11-17  
 ; NUMBER OF SEQ ID NOS: 47  
 ; SEQ ID NO 31  
 ; LENGTH: 2970  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 US-09-193-562D-31  
 Alignment Scores:  
 Pred. No.: 7,16e-198 Length: 2970  
 Score: 1998.50 Matches: 415  
 Percent Similarity: 63.38% Conservative: 163  
 Best Local Similarity: 45.50% Mismatches: 279  
 Query Match: 41.99% Indels: 55  
 DB: Gaps: 20  
 US-09-049-696-41 (1-914) x US-09-193-562D-31 (1-2970)  
 QY 2 GlyProPheLysSerSerValPheIleLeuIleLeuHisLeuGlnGlyAlaLeuSer 21  
 Db 130 GGCTCTATTGTCACACTGAAGTGTGATCTCTCTG-----GTTGCTTAAGT 177  
 QY 22 AsnSerLeu-----IleGlnLeuAsnAsnGlyTyrGlnGlyIle 35  
 Db 178 TCAAGACTCCCATTCCTGGAGCTGAGTACAGCTTCAAGCAATGGATTAATGATG 237  
 QY 36 ValValAlaIleAspProAsnValProGlnAspGlyThrLeuIleGlnIleLysAsp 55  
 Db 238 CTCATGTCAATTAATCTCTCAGTACCTGAGAAATCAGAACTCATCTCAAAATTAAGAA 297  
 QY 56 MetValThrGlnAlaSerLeuTyrLeuPheGlnAlaThrGlyLysArgPheTyrPheLys 75  
 Db 298 ATGATTAATCAAGCTTATTTTACCTTATTTAATCTCTACCAAGAGAGATTTTTCAGA 357  
 QY 76 AsnValAlaIleLeuIleProGlnThrTrpLysThrLysAlaAspTyrValArgProLys 95  
 Db 358 AATATTAAGATTTTAATTAATCTGCGCAATGGAACCTAAT---AATAACAGCAAAATTA 414  
 QY 96 LeuGlnThrTyrLysAsnAlaAspValLeuValIleGlnIleHisLysAsp 115  
 Db 415 CAGAAATCATATGAAAGGCAAAATGTATGATGACTGACGCTATGGGGCCATGAGAT 474  
 QY 116 GluProTyrThrGlnGlnMetGlyAsnGlyLysGlnLysGlyLysGlnIleHisLeuThr 135  
 Db 475 GATCCATACACCTTACATACAGAGAGGTGTGGAAGAAAGAGGAAATATCATTTTTCACA 534

QY	489	LeuGIuserLySgLYLeuThrlheuglansSerclnrlrphetsnnglyThrrVallleVal	508
Db	1597	CTTGAAGTACAGGCGAATAATGTCAAACTTCACCATCAATGGAACAAACAGAGACTTG	1656
QY	509	AspSerThrValGlyLySAspThrLeuPheLeuIleThrTrp---ThrrhrlnProPro	527
Db	1657	GATTAATACGTGGGCAACGACACTATGTTTCTAATTACGTGGCAGGCGAGTCTCTCT	1711
QY	528	GlnIleLeuLeuTrpAspProSerGlyGlnLys-----GlnGlyPheValValAsp	545
Db	1717	GGATTATATATATTTGATTCCTGATGAGCAAGAAATACACAAATATATTTTATCACCAAT	1776
QY	546	LysAsnThrLySmetAlaTrpLeuGlnIleProGlyIleAlaLysValGlyThrTrpLys	565
Db	1777	CTAACTTTTCGGACAGCTAGTCTTTGGATTTCCAGAAACACTTAAGCTGGCAGCTGAGAT	1833
QY	566	TrpSerLeu-----GlnAlaSerSerGlnThrLeuThrLeuThrValThrSerArg	582
Db	1837	TACACCTCGAACAATATACCATCATCTCTCTCCAGACCCCTGAAATGTGACAGTGCCTCTGC	1896
QY	583	AlaSerAsnAlaThrLeuProProIleThrValThrSerLySThrAsnLysAspThrSer	602
Db	1897	GGCTCAACTAGCTAGCTGTCGCCCAAGCCACTGTGGAAAGCTTTTGGAAAGAGCAAGCTTC	1956
QY	603	LysPheProSerProLeuValValTrpAlaAsnIleArgGlnGlyAlaSerProIleLeu	622
Db	1957	CATTTTCCTCATCCTGTGATGATTTATGCAATGTGAACAGGAGATTTATCCCATTTCT	2016
QY	623	ArgAlaSerValThrAlaLeuIleGlnSerValAsnGlyLySThrValThrLeuGlnLeu	642
Db	2017	AATGCCACTGTACCTGCCACAGTTGACCCAGACAGCTGGAGATCTCTTTAGCTGAGACTC	2076
QY	643	LeuAspAsnGlyAlaGlyAlaAspAlaThrLysAspAspGlyValTrpSerArgTrpPhe	662
Db	2077	CTTGATGATGAGGACAGGTGCTGATGATTAATAAAATGATGAGATTTACTCGAGGATATTT	2136
QY	663	ThrTrpTrpAspThrAsnGlyArgGlySerValLysValArgAlaLeuGlyGlyValAsn	682
Db	2137	TTTCTCTTGTGCTGAATATGGAGATATATGCTTGAAGTGCAT-----GTCAAT	2184
QY	683	AlaAlaArgArgArgValIleProGlnGln-----SerGlyAlaLeuTrpIle	698
Db	2185	CACCTCTCCACATTAAGACACCCAGCCACTCATTTCCAGGAGAGTCATGCTATGATGTA	2244
QY	699	ProGlyTrpIleGlnAsnAspGlnIleGlnTrpAsnProProArgProGlnIleAsnLys	718
Db	2245	CCAGGTTACACAGCAAGCAAGTAAATTTACATGAATGAATGCCTCAAGGAATACATGACGA	2304
QY	719	AspAspValGlnHisLySglnValLysPheSerArgTrpThrSerSerGlyGlySerPheVal	738
Db	2305	AATGAGGAGGAGCGCAAGGTGG---GGCTTTAGCCGAGTCAAGCTCAGAGAGCTCTTTTCA	2361
QY	739	AlaSerAspValProAsnAlaProIleProAspLeuPheProProGlyGlnIleThrAsp	758
Db	2362	GGCTGGGAGTTTCCAGCTGGGCCCCCAACCTGATGTCTTTCCACCAATGCAAAATTTATGAC	2421
QY	759	LeuLysAlaGlnIleHisGlyLySerLeuIleAsnLeuThrTrpThrAlaLeuProGlyLys	778
Db	2422	CTGCAGACT---GTAAAGTAGAAGAGAGGAATGACCTTATTTTGGACAGCCACTGGAGAA	2478
QY	779	AspTrpAspHisGlyThrAlaHisLySTrpIleIleArgIleSerThrSerIleLeuAsp	798
Db	2479	GACTTTGATGAGGCCAGCTGCTACAGCTATGAATATGAATATGAATAGTAAAGTCTACAGAT	2538
QY	799	LeuArgAspLysPheAsnGlnSerLeuGlnValAsnThrThrAlaLeuIleProLysGln	818
Db	2539	ATCCAAATGATGACTTTAACTGCTATTTTATGAATAATACATCAACGAAATCTCTACGAA	2598
QY	819	AlaAsnSerGlnGlnValPheLeuPheLysProGlnAsnIleThrPheGlnLysGlyThr	838
Db	2593	GCTGGCATCGAGGAGATATTTACGTCTTCAACCCAGATTTTCCAGC-----AATGGACT	2652
QY	839	Asp-----LeuPheIleAlaIleGlnAla	846





FILING DATE: 06-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
US-09-224-110-8

Alignment Scores:  
No.: 6,92e-131 Length: 878  
Score: 1347.00 Matches: 256  
Percent Similarity: 99.61% Conservative: 1  
Best Local Similarity: 99.22% Mismatches: 0  
Query Match: 28.30% Indels: 1  
Gaps: 0

US-09-049-696-41 (1-914) x US-09-224-110-8 (1-878)

OY 657 ValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyArgTyrSerValLysValArg 676  
DB 2 GCTCTCTCAAGGATTTTCACTTATGACCAAGTGTAGATACGTTAAAGTCCG 61  
OY 677 AlaleuGlyGlyValAsnAlaAlaArgArgValLleProGlnInserGlyAlaLeu 696  
DB 62 GCTCTGGAGAGATTACAGCAGCAGAGAGAGATATACCCAGAGAGTGGAGACTG 121  
OY 697 TyrLleProGlyTyrPleGluAsnAspGluLleGlnTyrAsnProProArgProGluLle 716  
DB 122 TACATACCTGGCTGATGATGAGATGATGAATGAAATGAAATCCACCAAGCTGAAAT 181  
OY 711 AsnLysAspAspValGlnHisLysGlnValLysPheSerArgThrSerGlyGlySer 736  
DB 182 AATAAGGATGATGTTCAACCAAGCAAGTGTCTTCAGCAACAATCCCGGAGGCTCA 241  
OY 737 PheValAlaSerAspValProAsnAlaProLleProAspLeuPheProProGlyGlnLle 756  
DB 242 TTTGGGCTTTCGATGCTCCCAATGCTCCCATACCTGATCTCTCCGACCTGGCCAAATC 301  
OY 757 ThrAspLeuLysAlaGluLleHisGlyLysSerLeuLleAsnLeuThrTyrThrAlaPro 776  
DB 302 ACCGACCTGAAAGCGCAATTCACGGGGGCACTCATTAATCTGACTTGGACAGCTCCT 361  
OY 777 GlyAspAspTyrAspHisGlyThrAlaHisLysTyrLleLleArgLleSerThrSerLle 796  
DB 362 GGGGATGATTAAGACCATGAAACAGCTCAAGTATATATTCGATTAAGTTCAGATAT 421  
OY 797 LeuAspLeuArgAspLysPheAsnGlnSerLeuGlnValAsnThrThrAlaLeuLlePro 816  
DB 422 CTTGATCTCAGAGACAGTTCATGATCTCTTCAAGTAAATACACTCTCTCTCATCCCA 481  
OY 817 LysGluAlaAsnSerGluLleValPheLeuPheLysProGluAsnLleThrPheGluAsn 836  
DB 482 AAGGAGCCCAACTGAGAGAGATCTTTTGTAAACCGAAGAAACATTAATCTTTGAAAT 541  
OY 837 GlyThrAspLeuPheLleAlaLleGlnAlaValAspLysValAspLeuLysSerGluLle 856  
DB 542 GGCACAGATCTTTTCAATGCTATTCAGGCTGTGATTAAGTGCATCTGAAACAGAAATA 601  
OY 857 SerAsnLleAlaArgValSerLeuPheLleProProGlnThrProProGluThrProser 876  
DB 602 TCACATTTTGAACGAGATATCTTTTATCTCTCCACAGACTCCGCGACAGACCTAGT 661

OY 877 ProAspGluThrSerAlaProCys-ProAsnLleHisLleAsnSerThrLleProGlyLle 896  
DB 662 CCGATGAAAGCGTCTCTCTCTGCTTATATTCATATCAACAGACCATTCCTGCAAT 721  
OY 896 eHisLleLeuLysLleMetTyrLysTyrPleGlyGluLeuGlnLeuSerLle 913  
DB 722 TCACATTTTAAATATATGTCGAGAGTGCAGCAATGCAAGTGTCAATA 773

#### RESULT 8

PCT-US95-07289-8  
Sequence 8, Application PC/TUS9507289  
GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
APPLICANT: Rosen, Craig  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carella, Byrne, Baln, Gillfillan, Cecchi,  
STREET: Stewart & Olstein  
CITY: Roseland  
STATE: NJ

COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US95/07289  
FILING DATE: 06-JUN-1995  
CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-265  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:

NAME/KEY: CDS  
LOCATION: 2..685  
PCT-US95-07289-8

#### Alignment Scores:

Pred. No.: 6,92e-131 Length: 878  
Score: 1347.00 Matches: 256  
Percent Similarity: 99.61% Conservative: 1  
Best Local Similarity: 99.22% Mismatches: 0  
Query Match: 28.30% Indels: 1  
Gaps: 0

US-09-049-696-41 (1-914) x PCT-US95-07289-8 (1-878)

OY 657 ValTyrSerArgTyrPheThrThrTyrAspThrAsnGlyArgTyrSerValLysValArg 676  
DB 2 GCTCTCTCAAGGATTTTCACTTATGACCAAGTGTAGATACGTTAAAGTCCG 61  
OY 677 AlaleuGlyGlyValAsnAlaAlaArgArgValLleProGlnInserGlyAlaLeu 696  
DB 62 GCTCTGGAGAGATTACAGCAGCAGAGAGAGATGATACCCAGAGAGTGGAGACTG 121  
OY 697 TyrLleProGlyTyrPleGluAsnAspGluLleGlnTyrAsnProProArgProGluLle 716  
DB 122 TACATACCTGGCTGATGATGAGATGATGAATGAAATGAAATCCACCAAGCTGAAAT 181



Db 122 TACATACCTGGCTGGATTGAGATGATGAAATACAAATGGAATCCACCAAGACTGAAAT 181  
Qy AsnlysaaspaValaGlnHisLysGlnValaCysPheSerArgThrSerSerGlyGlySer 736  
Db 182 AATAAGGATGATGTTCAACACAGCAAGTGTGTTCCACAGACACTCTCGGAGGCTCA 241  
Qy PheValaIaSerAspValaProAsnaIaProIleProAspleuPheProProGlyGlnIle 756  
Db 242 TTTGGGCTCTGATGTCCTCAATGCTCCATACCTGATCTCTTCCACCTGGCCAAATC 301  
Qy 757 ThrAspleuLysAlaGlnIleHisGlySerLeuIleAsnLeuThrTrpThrAlaPro 776  
Db 302 ACCGACCTGAAGGGGAAATTCAGGGGAGCTCATTAATCTGACTTGGACACTCTCT 361  
Qy 777 GLYAspAspLysArgPheHisGlyThrAlaHisLysTrpIleArgIleSerThrSerIle 796  
Db 362 GGGATGATTTATGACCATGAGACACTCACAAGTATATCATTCGATTAAGTACAAAT 421  
Qy 797 LeuAspleuArgAspLysPheAsnGluSerLeuGlnValaAsnThrThrAlaLeuIlePro 816  
Db 422 CTGTATCTCAGAGACAACTTCATGAATCTCTTCAATGGAATACAGCTCTCATCCCA 481  
Qy 817 LysGlnAlaAsnSerGlnGlnValaPheLeuPheLysProGluAsnIleThrPheGluAsn 836  
Db 482 AAGGAGCCAACTCTGAGAGAGCTCTTTGTTAAACCAAAACATTAATTTGAAAT 541  
Qy 837 GLYThrAspleuPheIleAlaIleGlnAlaValaAspLysValaAspleuLysSerGluIle 856  
Db 542 GGCACAGATCTTTCATGCTATTCAGGCTGTGATGAAGTCGATCAATCAGAAATA 601  
Qy 857 SerAsnIleAlaArgValaSerLeuPheIleProProGlnThrProProGluThrProser 876  
Db 602 TCACAACATGACAGGATCTTTGTTATTCCTCCACAGACTCCGCCAGAGACACTGT 661  
Qy 877 ProAspGluThrSerAlaProCys-ProAsnIleHisIleAsnSerThrIleProGlyIle 896  
Db 662 CCTATGTAAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 721  
Qy 896 eHisIleLeuLysIleMetTrpLysTrpIleGlyGluLeuGlnLeuSerIle 913  
Db 722 TCACATTTTAAATATATGTGGAAGTGGGTAGAGAACTGCAGTTGTCAATA 773  
RESULT 9  
US-09-221-298-34  
; Sequence 34, Application US/09221298  
; Patent No. 6284241  
; GENERAL INFORMATION:  
; APPLICANT: Xu, Jiangchun  
; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY AND DIAGNOSIS  
; FILE REFERENCE: 210121.471  
; CURRENT APPLICATION NUMBER: US/09/221.298  
; CURRENT FILING DATE: 1998-12-23  
; NUMBER OF SEQ ID NOS: 112  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 34  
; LENGTH: 401  
; TYPE: DNA  
; ORGANISM: Human  
US-09-221-298-34  
Alignment Scores:  
Pred. No.: 1,67e-55 Length: 401  
Score: 618.00 Matches: 130  
Percent Similarity: 95.59% Conservative: 0  
Best Local Similarity: 95.59% Mismatches: 0  
Query Match: 12.99% Indels: 6  
Gaps: 0  
US-09-049-696-41 (1-914) x US-09-221-298-34 (1-401)  
Qy 29 AsnaSnglyTrpGluGlyIleValaValaIleAspProAsnValaProGluAspGluThr 48  
|||||

Db 1 AACATGCGTATGAGGCGATTCGTCGCAATCGACCCCAATGTCGCCAAGATGAACA 60  
Qy 49 LeuIleGlnGlnIleLysAspMetValaThrGlnAlaSerLeuTrpLeuPheGluAlaThr 68  
Db 61 CTCATTCACCAATTAAGACATGCTGACCCAGGCACTCTGTATCTTTGAAAGCTACA 120  
Qy 69 GlyAspArgPheTrpPheLysAsnValaAlaIleLeuIleProGluThrTrpLysThrLys 88  
Db 121 GGAAGGCGATTTTATTTCAAAAATGTCCTCATTTGATTCCTGAAACATGGAAGCAAG 180  
Qy 89 AlaAspTrpValaArgProLysLeuGlnThrTrpLysAsnAlaAspValaLeuAla-Gl 108  
Db 181 GCTGACTATGAGACCAAACTTGAGACCTACAAAAATGCTGATGTTCTGCTTGA 240  
Qy 108 userThrProProGlyAsnAspGluProGlyThrGlnGlnMet-GlyAsnGlyGlyGlu 128  
Db 241 GCTACTCTCTCCAGGTAATGATGAACCTTACACTGAGCAGATGGGGCAACTGTGAGAGA 300  
Qy 128 ys-GlyGluArgGly-HisLeuThrProAspPheIleAlaGlyLysLysLeuAla-Glu 147  
Db 301 AGGGGTGAAGAGATCCACCTCCTCCTGATTTCTTCAGAGAAAAAGTTAGCTGAAT 360  
Qy 147 yrglyProGlnGly-ArgAlaPheValHisGluTrp 158  
Db 361 ATGACACAAAGGTAAAGGCGATTTGTCATGATGCG 396  
RESULT 10  
US-09-385-982-23  
; Sequence 23, Application US/09385982  
; Patent No. 6262334  
; GENERAL INFORMATION:  
; APPLICANT: ENDEGE, WILSON O., ET AL.  
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION  
; FILE REFERENCE: CCDNA-260XX  
; CURRENT APPLICATION NUMBER: US/09/385,982  
; CURRENT FILING DATE: 1999-08-30  
; EARLIER APPLICATION NUMBER: 09/328,111  
; EARLIER FILING DATE: 1999-06-08  
; EARLIER APPLICATION NUMBER: 60/117,393  
; EARLIER FILING DATE: 1999-01-27  
; EARLIER APPLICATION NUMBER: 60/098,639  
; EARLIER FILING DATE: 1998-08-31  
; NUMBER OF SEQ ID NOS: 544  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 23  
; LENGTH: 576  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc\_feature  
; LOCATION: (1)..(576)  
; OTHER INFORMATION: n = A,T,C or G  
US-09-385-982-23  
Alignment Scores:  
Pred. No.: 6,39e-45 Length: 576  
Score: 519.00 Matches: 115  
Percent Similarity: 73.40% Conservative: 23  
Best Local Similarity: 61.17% Mismatches: 48  
Query Match: 10.91% Indels: 5  
Gaps: 2  
US-09-049-696-41 (1-914) x US-09-385-982-23 (1-576)  
Qy 620 ProIleLeuArgAlaSerValaThrAlaLeuIleGluSerValaSnglyLysThrValaThr 639  
Db 2 CCTGTTCTTGAGCCAAATGATGCTGCTTTCATGATCAGAAATGACATACAGAACTT 61  
Qy 640 LeuGluLeuLeuAspAsnGlyAlaGlyAlaAspAlaThrLysAspAspGlyValaLysSer 659  
Db 62 TTGGAACCTTTGGATTAATGATGTCAGGCGCTGATCTTTCAAGAAATGATGAGTCTACTGC 121  
|||||

```

Qy 660 ArgTYRphEThrTYRAspThrAsnGlyArgTYRSeValValArgAlaLeuGly 679
Db 122 AGGTATTATACAGCATATATACAGAAATAGCATATAGCTTAAAGTGGGCTCATGGA 181
Qy 680 GLYValAsnAlaAlaArgArgValAlaIleProGlnGlnSerGlyValAlaLeuTYRlePro 699
Db 182 GGAGCAAAACACTGCGAGCTGAAATATACGCTCCACTGAATAGACCCGATACATACA 241
Qy 700 GYTTPRILEGluAsnAspGluILEGlnTPAsnProProArgProGluILEAsnLysAsp 719
Db 242 GGCTGGGTGTGACACGGGAATGTAGACAAACCCCAAGACCTGAATTCAT---GAG 298
Qy 720 AspValGlnHisLysGlnValLysPheSerArgThrSerSerGlyLysSerPheValAla 739
Db 299 GATACATCAACACACCTTGGAGGATTTCCAGCCAGACATCCGAGAGTGCATTTGGGTA 358
Qy 740 SerAspValProAsnAlaProIleProAspLeuPheProProGluTYRleThrAspLeu 759
Db 359 TCACAAAGTCCCAAGCTTCTTG-CCTGACCAATACCCCAAGTCAAAATCACAGACCTT 417
Qy 760 LysAlaGluILEHisGlyLysSerLeuILEAsnLeuThrTriPThrAlaProGlyAspAsp 779
Db 418 GATGCCACAGTTCATATAGATAAGATAT---CTTACATGACACACACAGAGATATAT 474
Qy 780 TYRAspHisGlyThrAlaHisLysTYRleIleArgIleSerThrSerIleLeuAspLeu 799
Db 475 TTTGATGTTGGAAAGTTCACGTTATATCATATAGAAATAT-CCCATATCTCTTGACAT- 532
Qy 800 ArgAspLysPheAsnGluSerLeu 807
Db 533 AGAGACAGTTTGTGATGATCTCTTA 556

```

## RESULT 11

```

US-09-385-982-25
; Sequence 25, Application US/09385982
; Patent No. 6262334
; GENERAL INFORMATION:
; APPLICANT: ENDEGE, WILSON O., ET AL.
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
; FILE REFERENCE: CCNDA-260XX
; CURRENT APPLICATION NUMBER: US/09/385,982
; CURRENT FILING DATE: 1999-08-30
; EARLIER APPLICATION NUMBER: 09/328,111
; EARLIER FILING DATE: 1999-06-08
; EARLIER APPLICATION NUMBER: 60/117,393
; EARLIER FILING DATE: 1999-01-27
; EARLIER APPLICATION NUMBER: 60/098,639
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 544
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 25
; LENGTH: 595
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(595)
; OTHER INFORMATION: n = A,T,C or G
US-09-385-982-25

```

## Alignment Scores:

```

Pred. No.: 1,23e-39 Length: 595
Score: 468.50 Matches: 97
Percent Similarity: 70.35% Conservative: 24
Best Local Similarity: 56.40% Mismatches: 48
Query Match: 9.84% Indels: 3
DB: 4 Gaps: 3

```

US-09-049-696-41 (1-914) x US-09-385-982-25 (1-595)

```

Qy 698 IIEPRGLTYRPILEGLuAsnAspGluILEGlnTPAsnProProArgProGluILEAsn 717
||||| ||||| ||| ||||||||| ||||||||| ||||||||| |||||||||

```

```

Db 3 ATACACGCTGGGTAGTGAACCGGGAATTTGAGCAAAACCCCAAGCTGAAATTCAT 62
Qy 718 LysAspAspValGlnHisLysGlnValLysPheSerArgThrSerSerGlyLysPhe 737
Db 63 ---GAGGATACACACACACACCTTGGAGGATTTACACCGGAAGCATCCGGAGTGATTT 119
Qy 738 ValAlaSerAspValProAsnAlaProIleProAspLeuPheProProGluTYRleThr 757
Db 120 GTGGTWTCCAAAGTCCCAAGCTTCCCTGCTGACCAATACCAAGTCAAAATCAC 179
Qy 758 AspLeuLysAlaGluILEHisGlyLysSerLeuILEAsnLeuThrTriPThrAlaProGly 777
Db 180 GACCTTGATGCCACACGNTCATGAGTAAATATAT---CTTACATGACACACACAGCA 236
Qy 778 AspAspTYRAspHisGlyThrAlaHisLysTYRleIleArgIleSerThrSerIleLeu 797
Db 237 GATATATTTGATGTTGAGAAAGTTCACGNTATATCATATAGAAATATGTCACAGTATCTT 296
Qy 798 AspLeuArgAspLysPheAsnGluSerLeuGlnValAsnThrThrAlaLeuIleProLys 817
Db 297 GATCTAAGAGACAGTTTTCATGATGCTCTTCAAGTAAATACATCATCTGTCACCAAG 356
Qy 818 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIleThrPheGluAsnGly 837
Db 357 GAGGCCAATCCAAAGAAAGCTTTCGCTTTAAACCGAAATATCTCAGAAAGAAATGCA 416
Qy 838 ThrAspLeuPheILEAlaILEGlnAlaValAspLysValAspLeuLysSerGluIleSer 857
Db 417 ACCCACTATTTATTTGCCCTTNAAGTATAGATANAGCA--ATTGACATCNAAGTNTC 473
Qy 858 AsnIleAlaArgValSerLeuPheIleProProGln 869
Db 474 CACATGNAACAAGTNACTTGTGTTATCCCTCAGCA 509

```

## RESULT 12

```

US-09-385-982-24/C
; Sequence 24, Application US/09385982
; Patent No. 6262334
; GENERAL INFORMATION:
; APPLICANT: ENDEGE, WILSON O., ET AL.
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
; FILE REFERENCE: CCNDA-260XX
; CURRENT APPLICATION NUMBER: US/09/385,982
; CURRENT FILING DATE: 1999-08-30
; EARLIER APPLICATION NUMBER: 09/328,111
; EARLIER FILING DATE: 1999-06-08
; EARLIER APPLICATION NUMBER: 60/117,393
; EARLIER FILING DATE: 1999-01-27
; EARLIER APPLICATION NUMBER: 60/098,639
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 544
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 618
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(618)
; OTHER INFORMATION: n = A,T,C or G
US-09-385-982-24

```

## Alignment Scores:

```

Pred. No.: 2,29e-37 Length: 618
Score: 447.00 Matches: 102
Percent Similarity: 67.66% Conservative: 34
Best Local Similarity: 50.75% Mismatches: 57
Query Match: 9.39% Indels: 6
DB: 4 Gaps: 6

```

US-09-049-696-41 (1-914) x US-09-385-982-24 (1-618)

```
QY 710 AsnProArqProGluIleAsnIleAspAspValGlnHisGlnValCysPheSer 729
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 605 AACNCGCAGACCTGAATTATGAGC---ATATCAGCCACNMGAG---GATTTCCGC 552
QY 730 ArgThrSerSerGlySerPheValAlaSerAspValProAsnAlaProIleProAsp 749
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 551 CGACAGATCCGAGGCG---ATTGTGGATCACAAGTCCCAAGCCTTCCCTTGCT-GAC 496
QY 750 LeuPheProProGluGlnIleThrAspLeuValGluIleHisGlySerLeuIle 769
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 495 CAATACCCACCAATCAATCAATCAATCAATCAATCAATCAATCAATCAATCAAT 436
QY 770 AsnLeuThrTrpThrAlaProGlyAspAspTyraSerPheIleGlnAlaHisGlyTyrIle 789
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 435 ---CTTACATGACAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 379
QY 790 IleArgIleSerThrSerIleLeuAspLeuArgAspLysPheAsnGluSerLeuGlnVal 809
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 378 ATAGCAATTAAGTCAGATGATCTTGATCTTGAAGACAGATTTGATGATGCTTCAAGTA 319
QY 810 AsnThrThrAlaLeuIleProGlyGluAlaAsnSerGluGluValPheLeuPheLysPro 829
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 318 AATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 259
QY 830 GluAsnIleThrPheGluAsnGlyThrAspLeuPheIleAlaIleGlnAlaValAspLys 849
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 258 GAAATATCTCAGAGAAATGCAACCCACATATTTATTTGCTATTAAGATATGATATA 199
QY 850 ValAspLeuLysSerGluIleSerAsnIleAlaArgValSerLeuPheIleProProGln 869
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 198 AGCATTTTGATCATCAAAAGTATCCACATTCACACAGTAAGTATGTTATATCCCAACCA 139
QY 870 ThrProProGlu---ThrProSerProAspLysThrSerAlaProCysProAsnIleHis 888
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 138 AATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 79
QY 889 IleAsnSerThrIleProGlyIleHisIleLeuLysIleMetTrpLysTrpIleGlyGlu 908
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 78 CATATTTCT-----GGAGTTAATATTTCTACGCTGCTGCTGCTGCTGCTGCTGCT 28
QY 909 Leu 909
|||
Db 27 GTT 25

RESULT 13
US-09-385-982-27
: Sequence 27, Application US/09385982
: Patent No. 6262334
: GENERAL INFORMATION:
: APPLICANT: ENDEGE, WILSON O., ET AL.
: TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
: FILE REFERENCE: CCDNA-260XX
: CURRENT FILING DATE: US/09/385,982
: EARLIER FILING DATE: 1999-08-30
: EARLIER APPLICATION NUMBER: 09/328,111
: EARLIER FILING DATE: 1999-06-08
: EARLIER APPLICATION NUMBER: 60/117,393
: EARLIER FILING DATE: 1999-01-27
: EARLIER APPLICATION NUMBER: 60/098,639
: EARLIER FILING DATE: 1998-08-31
: NUMBER OF SEQ ID NOS: 544
: SOFTWARE: FastSeq for Windows Version 3.0
: SEQ ID NO 27
: LENGTH: 611
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: misc_feature
: LOCATION: (1)...(611)
: OTHER INFORMATION: n = A,T,C or G
US-09-385-982-27
```

```
Alignment Scores:
Pred. No.: 1,02e-34 Length: 611
Score: 421.50 Matches: 93
Percent Similarity: 64.41% Conservative: 21
Best Local Similarity: 52.54% Mismatches: 44
Query Match: 8.86% Indels: 19
DB: 4 Gaps: 3

US-09-049-696-41 (1-914) x US-09-385-982-27 (1-611)
QY 620 ProIleuArgAlaSerValThrAlaLeuIleGluSerValAsn-GlyLysThrValTh 639
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 2 CCTGTTCTTGAGCCCAATGATGCTGCTTTCATTAATCAGAAATGGACATACAGAGT 61
QY 639 rIleuGluLeuAsnAspAsnGluAlaGlyAlaAlaSerAlaThrLysAspAspGlyTyr 659
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 62 TTTCGAATTTTGGATTAATGCTGACAGCGCTGATCTTTCAGAAATGATGAGTCTCTC 121
QY 659 rArgTyPheThrThrTrpAspThrAsnGlyArgTySerValLysValAlaAlaLeuG 679
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 122 CAGGATTTTTCACGATATACAGAAATGCGACATATAGCTTAAAGTTCGGCTCATG 181
QY 679 yGlyValAsnAlaAlaArgArgArgValIleProGlnIleSerGlyAlaLeuTyrllePr 699
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 182 AGGAGCAAAACACTGCGACGCTAAATATACGCGCTCCTCACTGAATAGAGCCGCTACATACC 241
QY 699 cGlyTrpIleGluAsnAspGluIleGlnTrpAsnProProArqProGluIleAsnLysAs 719
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 242 AAGCTGGGTAGTGAACGGGAAATGGAAGCAACCCGCAAGACCTGAAATTTGAT---GA 298
QY 719 pAspValGlnHisLysGlnValCysPheSerArgThrSerSerGlyLysPheValAl 739
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 299 GGATATCTCAGACCACTCTGGAGCATTTCAACCCGACAGCATCCGAGGTCATTTGTGCT 358
QY 739 aSerAsp-ValProAsnAlaProIleProAspLeuPheProProGlyGlnIleThrAsp 759
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 359 ATCAAAAGTCCCAAAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 418
QY 759 eLysAlaGlu-----IleHisGlyGlySerLeuIleAsnLeu 772
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 419 TTGATGCCCAAGTCATTAAGTAAATATTTCTTACATGCA----- 459
QY 772 hTrpThrAlaProGlyAspAspTyraSerPheIleGlyThrAlaHisLys 787
||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 460 -----NGCCCANGAATATTTTGTGATGTTNGNAAGNATCACCGCT 498

RESULT 14
US-09-385-982-33
: Sequence 33, Application US/09385982
: Patent No. 6262334
: GENERAL INFORMATION:
: APPLICANT: ENDEGE, WILSON O., ET AL.
: TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
: FILE REFERENCE: CCDNA-260XX
: CURRENT FILING DATE: US/09/385,982
: EARLIER FILING DATE: 1999-08-30
: EARLIER APPLICATION NUMBER: 09/328,111
: EARLIER FILING DATE: 1999-06-08
: EARLIER APPLICATION NUMBER: 60/117,393
: EARLIER FILING DATE: 1999-01-27
: EARLIER APPLICATION NUMBER: 60/098,639
: EARLIER FILING DATE: 1998-08-31
: NUMBER OF SEQ ID NOS: 544
: SOFTWARE: FastSeq for Windows Version 3.0
: SEQ ID NO 33
: LENGTH: 742
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: misc_feature
: LOCATION: (1)...(742)
: OTHER INFORMATION: n = A,T,C or G
```

US-09-385-982-33

## Alignment Scores:

Pred. No.: 1,42e-29 Length: 742  
 Score: 373.50 Matches: 82  
 Percent Similarity: 74.07% Conservative: 18  
 Best Local Similarity: 60.74% Mismatches: 33  
 Query Match: 7.85% Indels: 5  
 DB: 4 Gaps: 2

US-09-049-696-41 (1-914) x US-09-385-982-33 (1-742)

QY 698 ILEPROGLTYRPILEGLUASNAPGUILLEGLNTPRASPProProArgProGluIleAsn 717  
 Db 3 ATACCGGCTGGGTACTGACGGGAAATTTGAGCAAAACCCGCCAAGACCTGAAATTTGAT 62

QY 718 LysAspAspValGlnHisLysGlnValCysPheSerArgThrSerGlySerPhe 737  
 Db 63 ---GAGGATACACAGCCACCTTGGAGATTTCAGCCAGACAGATCCGAGGTGCAATT 119

QY 738 ValAlaSerAspValProAsnAlaProIleProAspLeuPheProGlyIleThr 757  
 Db 120 GTGGTATCACAGTCCCAAGCCTTCCCTGCTGACCAATACCCACAGTCAATCACA 179

QY 758 AspLeuLysAlaGluIleHisGlySerLeuIleAsnLeuThrThrAlaProGly 777  
 Db 180 GACCTTGATGCCACAGTTCATGAGATAAGATTATT---CTTACATGACAGCACCGA 236

QY 778 AspAspTyrAspHisGlyThrAlaHisLysTyrIleArgIleSerThrSerIleLeu 797  
 Db 237 GATTAATTTGATGTTGGAAAGTTCAACGTATATCATAGATTAAGTGCACAGTATTCTT 296

QY 798 AspLeuArgAspLysPheAsnGlnSerLeuGlnValAsnThrThrAlaLeuIleProLys 817  
 Db 297 GATCTAAGAGACAGTTTGTATGATGCTCTCAAGTAATCT-ACGTATCTGCA-CCAAAG 354

QY 818 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

QY 832 GluAlaAsnSerGlnGluValPheLeuPheLysProGluAsnIle 832  
 Db 355 GAGGCCAACCTTCAGGAAGCTTTCATTAA-CCANAAAAATATT 398

Db 2 AACAGCTACATTAATAGAAATTAAGTAAGATTTCATGATCGTCACAAAGATTTCACAAAT 61  
 QY 806 SerLeuGlnValAsnThrThrAlaLeuIleProLysGlnAlaAsnSerGluValPhe 825  
 Db 62 GCCACTTTAGTGAATCTTCTTAATCTTAATCTTAATCTTAATCTTAATCTTAATCTTAAT 121  
 QY 826 LeuPheLysProGluAsnIleThrPheGluAsnGlyThrAspLeuPheIleAlaIleGln 845  
 Db 122 GAATTTAAGCCAGAACATTTTAAAGTGAAGAAATGGCACAATTTCTATATTTCAGTCCAA 181  
 QY 846 AlaValAspLysValAspLeuLysSerGluIleSerAsnIleAlaArgValSerLeuPhe 865  
 Db 182 GCCATCAACGAAAGCAATCTCATCTCAGAGTTTCTCACATTGTACAAACCAATCAATTT 241  
 QY 866 IlePro 867  
 Db 242 ATTCTT 247

Search completed: October 17, 2002, 19:23:09  
 Job time : 96 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: October 17, 2002, 17:08:50 ; Search time 19 seconds  
(without alignments)  
1175.000 Million cell updates/sec

Title: US-09-049-696-41  
Perfect score: 4759  
Sequence: 1 MGFPEKSSVFILHLLEGAL.....GIHLKIMKIGELQSLIA 914

Scoring table: BLASTSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database :

Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PTCUS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	4753	99.9	914	US-09-193-562D-28	Sequence 28, Appl
2	2462.5	51.7	903	US-09-193-562D-46	Sequence 46, Appl
3	2328	48.9	905	US-09-193-562D-2	Sequence 2, Appl
4	2324.5	48.8	902	US-09-193-562D-34	Sequence 34, Appl
5	2258.5	47.5	1000	US-09-193-562D-30	Sequence 30, Appl
6	2125	44.7	795	US-09-193-562D-11	Sequence 11, Appl
7	2125	44.7	821	US-09-193-562D-12	Sequence 12, Appl
8	1987.5	41.8	943	US-09-193-562D-32	Sequence 32, Appl
9	1203	25.3	228	US-08-469-667-9	Sequence 9, Appl
10	1203	25.3	228	US-09-224-110-9	Sequence 9, Appl
11	1203	25.3	228	PCT-US95-07289-9	Sequence 9, Appl
12	947.5	19.9	342	US-09-193-562D-13	Sequence 13, Appl
13	408	8.6	203	US-09-193-562D-3	Sequence 3, Appl
14	143	3.0	2411	US-09-268-347-36	Sequence 36, Appl
15	140.5	3.0	1529	US-08-728-470-10	Sequence 10, Appl
16	140.5	3.0	1529	US-08-719-641-10	Sequence 10, Appl
17	138.5	2.9	1600	US-08-617-697-10	Sequence 10, Appl
18	137	2.9	1912	US-08-409-995-4	Sequence 4, Appl
19	137	2.9	1912	US-08-685-467-4	Sequence 4, Appl
20	137	2.9	2353	US-09-377-155-33	Sequence 33, Appl
21	137	2.9	2353	US-08-913-942-4	Sequence 4, Appl
22	137	2.9	2353	US-09-669-974-33	Sequence 33, Appl
23	137	2.9	2354	US-09-268-347-47	Sequence 47, Appl
24	130	2.7	1848	US-08-296-791-6	Sequence 6, Appl
25	130	2.7	1848	PCT-US95-10661A-6	Sequence 6, Appl
26	128	2.7	1536	US-08-038-682-2	Sequence 2, Appl
27	128	2.7	1536	US-08-302-832-2	Sequence 2, Appl

28	128	2.7	1536	2	US-08-530-198-2	Sequence 2, Appl
29	128	2.7	1536	2	US-08-469-880-2	Sequence 2, Appl
30	128	2.7	1536	2	US-08-728-470-2	Sequence 2, Appl
31	128	2.7	1536	2	US-08-617-697-2	Sequence 2, Appl
32	128	2.7	1536	4	US-08-719-641-2	Sequence 5, Appl
33	127.5	2.7	1702	4	US-08-296-791-5	Sequence 5, Appl
34	127.5	2.7	1702	4	PCT-US95-10661A-5	Sequence 5, Appl
35	121	2.5	710	4	US-09-171-461-16	Sequence 16, Appl
36	121	2.5	1541	4	US-08-296-791-3	Sequence 3, Appl
37	121	2.5	1541	5	PCT-US95-10661A-3	Sequence 3, Appl
38	118.5	2.5	599	3	US-09-045-632-28	Sequence 28, Appl
39	118.5	2.5	642	3	US-09-045-632-35	Sequence 35, Appl
40	118.5	2.5	818	3	US-09-045-632-25	Sequence 25, Appl
41	118.5	2.5	861	3	US-09-045-632-34	Sequence 34, Appl
42	118.5	2.5	918	3	US-09-045-632-31	Sequence 31, Appl
43	118.5	2.5	961	3	US-09-045-632-33	Sequence 33, Appl
44	118.5	2.5	1018	3	US-09-045-632-16	Sequence 16, Appl
45	118.5	2.5	1061	3	US-09-045-632-32	Sequence 32, Appl

#### ALIGNMENTS

RESULT 1									
US-09-193-562D-28									
Sequence 28, Application US/09193562D									
Patent No. 6309857									
GENERAL INFORMATION:									
APPLICANT: Pauli, Benedicht U.									
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium									
FILE REFERENCE: 18617.0052									
CURRENT APPLICATION NUMBER: US/09/193, 562D									
CURRENT FILING DATE: 1998-11-17									
PRIOR APPLICATION NUMBER: US/60/065, 922									
PRIOR FILING DATE: 1997-11-17									
NUMBER OF SEQ ID NOS: 47									
SEQ ID NO 28									
LENGTH: 914									
TYPE: PRT									
ORGANISM: Homo sapiens									
US-09-193-562D-28									
Query Match									
Best Local Similarity 99.9%; Score 4753; DB 4; Length 914;									
Matches 912; Conservative 2; Mismatches 0; Indels 0; Gaps 0;									
QY	1	MGPEKSSVFILHLLEGALNSLQLNNNGYEGIVAIDPNVDEDETLIQIKDMYQA	60						
DB	1	MGPEKSSVFILHLLEGALNSLQLNNNGYEGIVAIDPNVDEDETLIQIKDMYQA	60						
QY	61	SLYFEATGKRFRKNAVALIPETWTKRADYVRPLETKYKNADYLVASTPPGNDPEYTE	120						
DB	61	SLYFEATGKRFRKNAVALIPETWTKRADYVRPLETKYKNADYLVASTPPGNDPEYTE	120						
QY	121	QMGNGGGERIHLTPDIAKKLAIEYVPGRAVHEAHILRMGVDPDYNDEKFTYLSNG	180						
DB	121	QMGNGGGERIHLTPDIAKKLAIEYVPGRAVHEAHILRMGVDPDYNDEKFTYLSNG	180						
QY	181	RIQAVRCAGITGTNNVKKCGGSCYTRCFNNKVTGLYEGCFVLQSRQTERASIMFA	240						
DB	181	RIQAVRCAGITGTNNVKKCGGSCYTRCFNNKVTGLYEGCFVLQSRQTERASIMFA	240						
QY	241	QHVDSIVEFTEQHNHNEAPKQKCNLSTWEYIRSDSEDFKTTPTTQPPNPFSLL	300						
DB	241	QHVDSIVEFTEQHNHNEAPKQKCNLSTWEYIRSDSEDFKTTPTTQPPNPFSLL	300						
QY	301	QIGRIYCLVLDKSGSMATGNRLRNQAGOLFLOPYEIGSWGMVTFDSAIVQSELI	360						
DB	301	QIGRIYCLVLDKSGSMATGNRLRNQAGOLFLOPYEIGSWGMVTFDSAIVQSELI	360						
QY	361	QINGSDRLTLAKRILPAASAGTSICGLRSAPTVIRKKYPTDSEITVLTDGEDNTISG	420						
DB	361	QINGSDRLTLAKRILPAASAGTSICGLRSAPTVIRKKYPTDSEITVLTDGEDNTISG	420						

Db 361 QINSGSDRDLAKRLPAAASGGSISCSGLRSAPTVIRKKYPTDSEIVLLTDGEDNTISG 420  
Qy 421 CENEGKOSGAIHTHTALGPSSAQLSELSKMTGGLQTYASDOVONNGLLDAGALSSGNG 480  
Db 421 CENEGKOSGAIHTHTALGPSSAQLSELSKMTGGLQTYASDOVONNGLLDAGALSSGNG 480  
Qy 481 AVSORSIOLESKGLTLQNSQNMNGTVIVDSIVGKDTLFLITWTTPPOILLMDPSQOKG 540  
Db 481 AVSORSIOLESKGLTLQNSQNMNGTVIVDSIVGKDTLFLITWTTPPOILLMDPSQOKG 540  
Qy 541 GGVVAKNRMALQIPGLAKVGTWKYSLOASSQTLTLVTYSASNAATLPPIVTYKTNKD 600  
Db 541 GGVVAKNRMALQIPGLAKVGTWKYSLOASSQTLTLVTYSASNAATLPPIVTYKTNKD 600  
Qy 601 TSFSPSPVYVYANIRKOGASPIIRASVTALIESVNGKTVLLELDNGAGADATKDDGVYSR 660  
Db 601 TSFSPSPVYVYANIRKOGASPIIRASVTALIESVNGKTVLLELDNGAGADATKDDGVYSR 660  
Qy 661 YFTTYDNGRYSVKVRAALGVNAARRRVIPQSGALYIPGWIENDEIQNPPREINKDD 720  
Db 661 YFTTYDNGRYSVKVRAALGVNAARRRVIPQSGALYIPGWIENDEIQNPPREINKDD 720  
Qy 721 VOHKOVCSRTSSGGSFVASDVPNAPIPDLFPPGQITDLKAIHSGSLINLTWTAPGDY 780  
Db 721 VOHKOVCSRTSSGGSFVASDVPNAPIPDLFPPGQITDLKAIHSGSLINLTWTAPGDY 780  
Qy 781 DHGTAHKYIIRISTSLDLRDKFNESIQVNTALIPKEANSEVEFLFKENITFENGTDL 840  
Db 781 DHGTAHKYIIRISTSLDLRDKFNESIQVNTALIPKEANSEVEFLFKENITFENGTDL 840  
Qy 841 FAIAOAVDKVDLSEISNARVSLPIPPOTPEPSPDETSAFCPNIHINSTIPGIHILK 900  
Db 841 FAIAOAVDKVDLSEISNARVSLPIPPOTPEPSPDETSAFCPNIHINSTIPGIHILK 900  
Qy 901 IMMKNIGELQLSIA 914  
Db 901 IMMKNIGELQLSIA 914

RESULT 2  
US-09-193-562D-46  
; Sequence 46, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 46  
; LENGTH: 903  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal  
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-  
; OTHER INFORMATION: 31026)  
US-09-193-562D-46

Query Match 51.7%; Score 2462.5; DB 4; Length 903;  
Best Local Similarity 55.4%; Pred. No. 3,1e-205;  
Matches 494; Conservative 139; Mismatches 233; Indels 25; Gaps 13;

Qy 1 MGPFKSSVFILHLHLLEGALNSLQLNNGYEGIVVAIDPNVPEDETLQOIKMDWTOA 60  
Db 1 MVRPLVLFLFLHLPLG-MKSSMVLINNGYGVIAINSPVDEKILQNKKEWVTA 59  
Qy 61 SLYLEATGKRYFKVNAVLIPETWTKADYVRPKLEYTKNADVLVAESTPPGNDPEPYE 120  
Db 61 SLYLEATGKRYFKVNAVLIPETWTKADYVRPKLEYTKNADVLVAESTPPGNDPEPYE 120

Db 60 STYLFHAIRKRRYFRNVSILIPMTKRSKSEYLMPOKESYDAQEVIVANPYLKHGDDPYTL 119  
Qy 121 OMNGCGEKERLHLPPDFIAGKLLAEYGPGRAPFHEMAHLMGVGFDENDNEKLYS-N 179  
Db 120 QYGRGGEKQYTHFTFNPFLITNNLPIYSGRGRAPFHEMAHLMGVGFDENDNEKLYS-N 179  
Qy 180 GRIQAVRCSAGITGNVYKCKOGGSCYTKRCTFNKVTGLYKEGCEPVLQSRQTEKASTME 239  
Db 180 MTIATRCSTHITGNVYKCKOGGSCYTKRCTFNKVTGLYKEGCEPVLQSRQTEKASTME 239  
Qy 240 AOHVDSIYFCTEONHNKAPRKQOKLBRSTWEVINDSEDEKTTPTT--TQPPNPF 297  
Db 240 MSLHSVIEFCTEONHNKAPRKQOKLBRSTWEVINDSEDEKTTPTT--TQPPNPF 297  
Qy 298 SLLOIGORIVCLVLRKSGMATGNRLNRLOAQGLFLQTYELGSMVGVATPDSAAHVS 357  
Db 300 SILKSKQRYVCLVLRKSGMATGNRLNRLOAQGLFLQTYELGSMVGVATPDSAAHVS 357  
Qy 358 ELIOINSGSDRDLAKRLPAAASGGSISCSGLRSAP-TVIRKKRYPDSEIVLLTDGEDN 416  
Db 360 NLTKITDDRVENITANLPOEANGGTSICRGLKAGFOALIQSGSTGSEIILLTDGEDN 419  
Qy 417 TISGCFNEKOGSALHTHTALGPSSAQLSELSKMTGGLQTYASDOVONNGLLDAGALSS 476  
Db 420 EIHSCIEEKOGSALHTHTALGPSSAQLSELSKMTGGLQTYASDOVONNGLLDAGALSS 476  
Qy 477 SCNGAVSORSIOLESKGLTLQNSQNMNGTVIVDSIVGKDTLFLITWTTPPOILLMDPSG 536  
Db 478 SRSGSTIQTOTIDLESKALALITEKKNVNGTVPYDSTIGNDTFFVYVWTIKPFIILLQDPG 537  
Qy 537 Q--KGGFVYDK-NRKMAVLOIPGLAKVGTWKYSL---QASSQTLTLVTYSASNAATLP 590  
Db 538 KRYKTSDFEKEDLNTHSARLIRPGIAETGWTYSLLNNASPOLITLVYTTBARSPPTPP 597  
Qy 591 ITVTSKTNKDTSKPPSPLVVYANIRKOGASPIIRASVTALIESVNGKTVLLELDNGAGAD 650  
Db 598 VTATAHMONTAHPSPLYVYAOVSGFLPYLGINTVLTILEFEDGHQVLTLELDNGAGAD 657  
Qy 651 ATKDDGVYSRYFTTYDNGRYSVKVRAALGVNAARRRVIPQSGALYIPGWIENDEIQN 710  
Db 658 ATKDDGVYSRYFTTYDNGRYSVKVRAALGVNAARRRVIPQSGALYIPGWIENDEIQN 717  
Qy 711 PPREINKDDVOHKOV-CSSRTSSGGSFVASDVPNAPIPDLFPPGQITDLKAIHSG 766  
Db 718 PPREINKDDVOHKOV-CSSRTSSGGSFVASDVPNAPIPDLFPPGQITDLKAIHSG 766  
Qy 767 SLINLTWTAPGDYDHGTAHKYIIRISTSLDLRDKFNESIQVNTALIPKEANSEVEFL 826  
Db 775 --TQSWTAPANVLDKGRANSTYIRISKSFLLQKDFDNATLVNTSSLKFKRAGSDENFE 832  
Qy 827 FKPENTFENGTDLFLAIOAVDKVDLSEISNARVSLPIPPOTPEPSP 877  
Db 833 FKPENTFENGTDLFLAIOAVDKVDLSEISNARVSLPIPPOTPEPSP 877

RESULT 3  
US-09-193-562D-2  
; Sequence 2, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 2  
; LENGTH: 905  
; TYPE: PRT  
; ORGANISM: Unknown

FEATURE:  
OTHER INFORMATION: lu-ECAM-1 precursor from bovine endothelial cells  
US-09-193-562D-2

Query Match 48.9%; Score 2328; DB 4; Length 905;  
Best Local Similarity 53.3%; Pred. No. 1.6e-193;  
Matches 465; Conservative 144; Mismatches 247; Indels 16; Gaps 11;

QY 8 VFILHLLEGALNSLIQLNNNGEIVVAIDPNVPEDELLQIKMVAQASLYFEA 67  
D 8 ILFLTLHLPE-KSSMVLNNGIDGIVAINPSVPEDEKLISIKEMVTEASTYLEHA 66  
QY 68 TGRKRFYKNAAILPETWTKADYVRPKLEYKKNADYLVASTPPGNDPEYEQMGNGE 127  
D 67 TKRIVYRNVSILIPMTWKSSEYFIKQESYDQADYVAVNPYLKGGDPPTLYOGRGE 126  
QY 128 KGERIHLTPDFIAGKLAIEYGPGRAFVHEMAHLRMGVFDEYNDEKFEYS-NGRIQAVR 186  
D 127 KGKIHFTPNFLNNPHIYSGRGRVFEHMAHLRMGFIDEYNVQPEYISRKNTIEATR 186  
QY 187 CSAGITGTNV-KKCGSCCTKRCCTFNKVTGLYKGEFVLOSQTEPKASIMRAQVDS 245  
D 187 CSTHTGTNVKCKPGSCCTSLCRDSQGTGLYEAQCTFLPKKSQYAKESIMPSLSHS 246  
QY 246 IVECTEQNHKEAPNKNOKCNLRSTWEVIRDSDEFEKTPMT--TOPPPTFSILOIG 303  
D 247 VTECTEKTHTTEAPNLQNMKCNKSTMDYIMNSVDYDONTPTMEMPPTPTPSILSKS 306  
QY 304 QRIYCLVLDKSGSMATGNRLNRLNOAGOLFLLQTVELGSMVGVTFDSAHAHVSLEIQIN 363  
D 307 QRYVCLVLDKSGMSADERLFQMNQAEELYLYIEKGLVGMVTFDSVAELQNHILTRIT 366  
QY 364 SGRSRLARLPAAASGCTSCGSLRSF-TVIRKKYPTGSGSEVLITDSEDNTISCF 422  
D 367 DDNYQKITALPOVANGGTSICRGLAGFOALIHSDOSTGSSEILITDDEMEINCF 426  
QY 423 NEVQSGAIIHTVALGPSAOLEELSKMTGLOTYASDOYONNGLIDAFALSGNCAV 482  
D 427 EDVARSQAIIHTIALGPSAAKELETKSMGTGYPFANKD--TGLTNAFBRISRSSTI 484  
QY 483 SQRSLQESKGLTQNSOMNGTIVDSTVGKDTLFLITWTTPQPIILMDPSGO--KOG 540  
D 485 TQQAIOLESKALKITGRKRVNGTVPDSTVGNDTFEVTMTIQPEIYLOPKKRYTS 544  
QY 541 GFVVDK-NTKAVYLOIGIAKVGTMKYSL--OASSOTLITVTSRASNALPPTVYSK 596  
D 545 DEKEDKLNIRARLOIPGIAETGTWYSLNNHASSQMLVTVTTRASPPIPVIAIAH 604  
QY 597 TNKDTSKFSPPLVYVANIROGASPIILRASVATLIESVNGKVTLELDNGAGADATKDG 656  
D 605 MSQHTAHYSPMIYVYAOVSQGFVPLVIGSVTAIETEDGHQVTEIMDNGAGROTVKNDG 664  
QY 657 VYSRFTTYDNGRYSYKVRALGVNAARRVYIPQSGALYIPGWIENDEIQMPPREI 716  
D 665 IYSRYFDYDNGRYSKLVHAQANNTARLMLROPKNVLYVPGVENGKIIILMPPREV 724  
QY 717 NKDVOKRQVCFSTSSGSPVASDY--PNAPIPLDLPFGQITDLKAEIHGSLNLTMTA 775  
D 725 KODLAKAKIEDFSRLTSGSSTVSGAPPCGNHPSVFPSPKTTIDEAKK-EDYIQLSWTA 783  
QY 776 PGDDYDHGTAHXYIIRISTSLDLRKFNSLQVNTTALIPKEANSEVEFLFKENITFE 835  
D 784 PGVNLIDGKANSYIIRISKSPMDRQEDPDNATLVNTSLIPKEAGSKNEFEKHEHRAVE 843  
QY 836 NGIDLFAIQAVDKVLDKSEISNARYSLFIP 867  
D 844 NGTFYISVOAINEANLISEVSHVOAIKFIIP 875

RESULT 4  
US-09-193-562D-34  
Sequence 34, Application US/09193562D  
Patent No. 6309857

GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193.562D  
CURRENT FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 34  
LENGTH: 902  
TYPE: PRT  
ORGANISM: Mus musculus  
US-09-193-562D-34

Query Match 48.8%; Score 2324.5; DB 4; Length 902;  
Best Local Similarity 52.3%; Pred. No. 3.1e-193;  
Matches 479; Conservative 143; Mismatches 257; Indels 37; Gaps 15;

QY 1 MGPESSVFILHLHLLEGALNSLIQLNNNGEIVVAIDPNVPEDELLQIKMVAQASLYFEA 60  
D 1 MYPGLVLLFLTLHLQNT-BSSMVHLNSNGEIVVAIDPNVPEDEKLISIKEMVTEASTYLEHA 59  
QY 61 SLVYEATGRKRFYKNAAILPETWTKADYVRPKLEYKKNADYLVASTPPGNDPEYEQMGNGE 120  
D 60 STYLFASQGVYRNISILVPMTKKSSEYFIKQESYDQADYVAVNPYLKGGDPPTLYOGRGE 119  
QY 121 QMGNGEKGERIHLTPDFIAGKLAIEYGPGRAFVHEMAHLRMGVFDEYNDEKFEYS-N 179  
D 120 QYQCGDGRGOYIHLFPNPLFLDNLRLTYGPRGRVFEHMAHLRMGVFDEYNDRSPYISRK 179  
QY 180 GRIQAVRCSAGITGTNVKCKPGSCCTSLCRDSQGTGLYEAQCTFLPKKSQYAKESIMPSLSHS 239  
D 180 NTIATRCASITGKVVHECOGSCVTRACRDSKTRLYEPKCTFLIPDKIOTAGASIMF 239  
QY 240 AQHVDYIEFTEQNHKEAPNKNOKCNLRSTWEVIRDSDEFEKTPMT--TOPPPTFSILOIG 297  
D 240 MQLNSVYEFCTENNHNAPNLQNMKCNKSTMDYIMNSVDYDONTPTMEMPPTPTPSILSKS 299  
QY 298 SLQIGQRIYCLVLDKSGSMATGNRLNRLNOAGOLFLLQTVELGSMVGVTFDSAHAHVSLEIQIN 357  
D 300 YLKSRRRVCLVLDKSGSMKEDRLIRMQAELLYLYIEKESMGLVTFDSAHAHVSLEIQIN 359  
QY 358 ELIQNSGSDDTLAKRLPAAASGCTSCGSLRSFITYIRK-YPTQSEYVLLTDGEDN 416  
D 360 YLKITSSSDYQKITALPOVANGGTSICRGLAGFOALIHSDOSTGSSEILITDDEMEINCF 419  
QY 417 TISGCFNEVQSGAIIHTVALGPSAOLEELSKMTGLOTYASDOYONNGLIDAFALSGNCAV 476  
D 420 GIRSCFEVARSQAIIHTIALGPSARLEFLTSDGTGLRFRYANKD--NSLIDAFSRLS 477  
QY 477 SGNQVARSQSLQESKGLTQNSOMNGTIVDSTVGKDTLFLITWTTPQPIILMDPSGO--KOG 536  
D 478 STSGSVSQOALQLESKADYVAGAMINGTVPDSTVGNDTFEVTMTIQPEIYLOPKKRYTS 537  
QY 537 OK--QGGFVVDK-NTKAVYLOIGIAKVGTMKYSLOAS-SOTLITVTSRASNALPPTVYSK 592  
D 538 KKYTTSDPQDDKLNIRARLOIPGIAETGTWYSLTSGKSLQVNTTALIPKEANSEVEFLFKENITFE 597  
QY 593 VTSKTNKDTSKFSPPLVYVANIROGASPIILRASVATLIESVNGKVTLELDNGAGADAT 652  
D 598 GYCMQSGTATYPRSMYIYARVANSOGFLPYLGANTATLIEAHGHOVTEIMDNGAGADIV 657  
QY 653 KDDGVYSRFTTYDNGRYSYKVRALGVNAARRVYIPQSGALYIPGWIENDEIQMPPREI 709  
D 658 KNDGIYRYFDYDNGRYSKLVKVR---VQAKRKTRLSLRQKKSKSYIIPGVENGKIIIL 713  
QY 710 NPPPEIKNDVOKRQVCFSTSSGSPVASDY--PNAPIPLDLPFGQITDLKAEIHGSLNLTMTA 764  
D 714 NPPPEIDVQEEALIEATVEDFNVTSGSSTVSGAP---PDGDHARVFPSPSVTIDEAEFI 769  
QY 765 GGSILNLTWAPGDDYDHGTAHXYIIRISTSLDLRKFNSLQVNTTALIPKEANSEVEFLFKENITFE 824

```
Db 770 -GDYIHLTAVGKVLVDNGRAHRYIIRMSQHPDLQEDFNNAATLVNASSLIREKAGSKEA 828
Oy 825 FLFRKENTFEFGDPLFLIAQAVDKLSEISNIAVSLFIPQTPPTPPDEISAPC 884
Db 829 FRKPEIRKIAIGDLYIAIQADNEASLSEVSNTA-----QAVKLTSLEDISALG 880
Oy 885 PNII-INSTIPCIHIL 899
Db 881 DDISAISMTIMGLTVI 896

RESULT 5
US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065.922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 30
; LENGTH: 1000
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-193-562D-30

Query Match 47.5%; Score 2258.5; DB 4; Length 1000;
Best Local Similarity 51.7%; Pred. No. 2e-187;
Matches 466; Conservative 140; Mismatches 253; Indels 43; Gaps 13;

Oy 4 FRSSPFIILHLLEGALSLSLIQNNNGEGIVVAIDPNVPEDETLIQIKMVTQASLY 63
Db 3 FSLKILFLSLLSPLVLSLVTNNNGYDGIIVAINPSVPEDEKLIONIKEMVTQASTH 62
Oy 64 LEFATGRPRFEKFNVAIILPETWTKADYVRPKLETYKKNADVVAESTPGNDEPTBOG 123
Db 63 LFHAKQRAYFPFNVAIILPMYTKSKSEYILPKQETTDQADYVADLYLKGDDPTLLQYG 122
Oy 124 NCGEGERIHLTPDEIAGKLAIEYGPGRAFVEMAHLMWGFVDEYNDEKPYLS-NGRI 182
Db 123 QCGDGGQYIHFTPNFLTNLNLATYGRKGVFVGHNAHLRMWGFVDEYNQPYISRNNT 182
Oy 183 QAVRSAGITGIVNVKKGQGGSCYTRKCTFNKVTGLYEKGCEFVLQSRQTEKASIMFAQH 242
Db 183 EATRCSTRITVYMWINECKGASCIAFRFRDSQGTGLYEAKCTFIPKRSQTAKESIVFMQN 242
Oy 243 VDSIEFECTEOHNNKEAPKONKCNLRSTWEVIRDSSEDFKTTPTMT--TQPNPTFSLLQ 301
Db 243 LDSVTEFECTEKHNKEAPRLYKKNHSTWDVIMSSDFQHLSPTEINLFRPTFSLLK 302
Oy 302 IGQRIIVCLVLDKSGSMATGNRLNRLNOAGQLPFLQTVELSGVWVATPDSSAAHVOSLQ 361
Db 303 SKQRYVCLVLDKSGSMNEDRLFRMNOAAELYLQIIEKGSVLGVLTDFSAFKIDSKLIK 362
Oy 362 INSGDROTLAKRLPAASGGSITSGLRSATVI-RKKYTPPDGSEIVLLTGEDNTISG 420
Db 363 IIDDTYOKITANLPQEDGGSITCRGLKAGFOALPQSNQSTFGSEIILLTGEGEYOQLS 422
Oy 421 CFNEVKOGAIIHTVALGPSAEOELBELSKMTG-----GLQTVAS 460
Db 423 CFGEVKOGSTVHTITALGPSADELETLSNMTGLKHGHCYTSSYSAGKFTICGHRFTAH 482
Oy 461 DOVONNGILDAFGALSGAVSQRSDLESKGLTLQNSQMMNGTVIYDSTVGKDTLFLI 520
Db 463 KNI--NGILDAFRSISSSGSIISQALQLESKTLNIPAKKWTJNGVYDSTVRANDTSFV 540
Oy 521 TWITOPQIILMDPSGQK-----OGGFVVDKNTKMAIYLQITGIKAVGTWKYSLO---AS 571
```

```
Db 541 TWITQIPALIILODPKGRKTYTSDFOEG---ELINISARLIRIGIAETGIWTSVNNHTK 597
Oy 572 SOTLTLTVSRASNNLTPITVTSKTNKOTSKFSPPLVYANIRQASPIILASTALIE 631
Db 598 SOLTLVTMTKARSPTLTVIATSHSMOMTAPHPSVVIYACVSGFELVINTVATIE 657
Oy 632 SVNGKVTLELLDNGAGADATKDDGYRSRYFTTYDNGRYSKVRALGCVNARRRVIPO 691
Db 658 NEGHQVITLCLDNGAGADSVKNDGYSRYFTDYHNGNGRSLKVLTLQAKNKA--RLSQ 715
Oy 692 QSGALYIPGWIINDEIQNPPPEINKDDYQHKOV-CESRTSSGGSFVASDV-PNAPIPD 749
Db 716 QNKALYVPRYANNGKILNPSKPEVY-DDEGAQOTDDFSRLTSGSFYSGVPPNGNHSQ 774
Oy 750 LPPPGQITDLKAEIGSLINTLTWTAAPGDYDGHAKYIIRSTSIIDLRKFNFSLQY 809
Db 775 VSPGKIVDEAKFQGDH-TQLSMTAPKAVLDKGRARESTIIRSKHFLDLOEDFKAALI 833
Oy 810 NTTALIPKEANSEEVFLFKPENITFENGTDLFIAIQAVDKLSEISNIAVSLFIPQ 869
Db 834 NTSGLIPKPGSVESPEFKPEPSKIENGTTFYIAQIAHEANVTSEVSNIAQATNFIPO 893
Oy 870 TP 871
Db 894 EP 895

RESULT 6
US-09-193-562D-11
; Sequence 11, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065.922
; PRIOR FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 11
; LENGTH: 795
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells
US-09-193-562D-11

Query Match 44.7%; Score 2125; DB 4; Length 795;
Best Local Similarity 53.8%; Pred. No. 5.7e-176;
Matches 425; Conservative 125; Mismatches 224; Indels 16; Gaps 11;

Oy 8 VFILHLLEGALSLSLIQNNNGEGIVVAIDPNVPEDETLIQIKMVTQASLYLFA 67
Db 8 IIFLHLHLPG--MKSSMVLINNGYDGIIVAINPSVPEDEKLIONIKEMVTQASTH 66
Oy 68 TGRPRYFKNVAIILPETWTKADYVRPKLETYKKNADVVAESTPGNDEPTBOGNGCE 127
Db 67 TKRRYFRFNVSLIIPMTKSKSEYILPKQESTYDQADYIANYLYLKGDDPTLLQGRGCE 126
Oy 128 KGERIHLTPDEIAGKLAIEYGPGRAFVEMAHLMWGFVDEYNDEKPYLS-NGRIQAVR 186
Db 127 KKKYIHFTPNFLTNHFNHYSRGVYFVEMAHLMWGFVDEYNQDPPFISKKNTEAR 186
Oy 187 CSAGITGINV-KKQGGSCYTRKCTFNKVTGLYEKGCEFVLQSRQTEKASIMFAQHDS 245
Db 187 CSTHTIGIVNFKKPGGSCITSLCRDSQGTGLYEAKCTFIPKKSQTAKESIMFMSLHS 246
Oy 246 IVEFCTEOHNNKEAPKONKCNLRSTWEVIRDSSEDFKTTPTMT--TQPNPTFSLLQ 303
Db 247 VTEFCTEKHNKEAPRLYKKNHSTWDVIMSSDFQHLSPTEINLFRPTFSLLSK 306
```



0Y 304 ORIVLLIDKSSMNTGNLNLNAGOLFLOTLQTVLEWVMWMPDSAAHOSLEIOIN 363  
||:|||||:: ||:||||:|:|:|:|:|:|:|:|:|:|:|:|:|:  
Db 307 QRYVCLLVLDKSSMSAEDELFOFMOAAELLYLQVLEKGLVGVTFFDVAEIONHLTRLT 366  
364 SGGSDRLTAKRLPPAASGGSIGCSGLRSAP-TVIRKKPYTPDSEIYLTLDTGEDNTISGCF 422  
: ||:|||||:: |: |: ||:|||||:: |:  
Db 367 DNNYQKITAKLPQVANGETSTICRGLKMGFOALIHSDOSTSGSEIILLTDGENENISCF 426  
423 NEVKOSGAIIHTVALGPSPAOLEBELSKMTGGLQTYVASDOVONNGLLIDAFALISSNGAV 482  
||:|||||:: ||:||||:|:|:|:|:|:|:|:|:|:|:|:|:|:  
Db 427 EDVKRSGAIIHTIALGPSAAKELETKSNMTGGYREFPANDI--TGLTNAFSRISSRGSI 484  
483 SORSLIOLESKGILLNSQMNGTVYDSTVYGKDTEFLIMWTQPPOIILMDPSGC--KQG 540  
||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: |:  
Db 485 TQOALIOLESKALKITGRKKVNSTVPDSTVGDNTFEVVYTLQKPETVLADDPKGVKYTS 544  
541 GFVNVK-NTKMAVLIQPIGIAKTGWTKYS--QASSOTLTLVTSRASNATLPLPTVTSK 596  
|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:  
545 DEKEDKLNIARSARLIQPIGIAETGTMYSLNNHASOMLTVTVTRARPTIPVIATAH 604  
597 TNKDTSKRPSPPLYVANIROGASPILIRASVYALLIESVNGKTVYTELLDNAGADATKDCG 656  
||:|||||:: ||:||||:|:|:|:|:|:|:|:|:|:|:|:|:|:  
605 MSQHAPHSPPMITVAYAOVSOGFLPVLGISVIAIIEETDEGHQVTLLEIMDNCAGRDTVKNDG 664  
657 VYSREFTYDNTGRSVKVRALGCVNAARRRYIPOOSSGLXYIPGWEENEIOMNPREPI 716  
||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: |:  
Db 665 IYSRFETDYDGGRYSLKHAQARNNTALNLKOPNKVLVPGVYENGKIILNPPEV 724  
717 NKDDVOHKOVCSRRTSSGGSFVASDV-PNAPIPDLEFPQGIINDLKAINGSLINTWTA 775  
725 KODLAKEKIEDPSRLTSGSFTVSGAPPPGNHPSPVPPSKITDLKPK-EDYQLSWTA 783  
776 PGDDYDHGA 785  
||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: ||:|||||:: |:  
Db 784 PGNVLDKGRA 793

RESULT 7  
US-09-193-562D-12  
; Sequence 12, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193.562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 12  
; LENGTH: 821  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells  
US-09-193-562D-12

Query Match	Similarity	44.7%	Score 2125	DB 41	Length 821
Best Local	Similarity	53.8%	Pred. No. 6.1e-176		
Matches 425	Conservative	125	Mismatches 224	Indels 16	Gaps 11
OY	8	VFILLHLELEGALNSLTLQNNNGEGYVAIDPNVPDEETLLOQIKDWTOASLYLFEPA	67		
		: : : :           : : :           : : :			
DB	8	ILFLHLPLPG-MKSSMVALINNGYIDGVIYAIINPSPYDEBEKLEINIKEMVATASLYLFFPA	66		
OY	68	TKRREYFKNVALILEFTWTKADYVRPKLEYTKNADVLVAESTPGNDPEYTEOMGNCGE	127		
		:   :   :           : : : :           :           :			
DB	67	TKRRVYFRNVSILIPMTWKSSEYFLPKQESTVDQADVIVANPYLAKGDDPYTLQYGRGCE	126		
OY	128	KGERHLLPDPFLAGKLLAEYGPQGRAFYHEMAHLKMGVDFEYDNNDEKEYLS-NGRIQAVR	186		

Db	127	KGKYIHEHPNLLNNFNIHSRRVRFEVHEAHILRMGIPEIDYVNDQGFYISRRKLTIEATR	186
OY	187	CSAGITGTNVV-KKCOGSGCYTKCTENKATGLYEKCEFYLOSROTOKASIMFAOHVDS	245
Db	187	CSHTITGINVFKKCPGSGCITISLCRRSOTGLYEACTEFLPKKSQAKESIMFEMPLHS	246
OY	246	IYECETEDNHKKKPNKONOKCNLSRMFEVRSDESEITPKM--TOPRPPRSILQIG	303
Db	247	YTERCTEHTNTEHPNLLNNKCKMCKRSTWDVIMNSVDONSPMTENMPHPHPSILKSK	306
OY	304	ORIVCLVADKSGSMATGNRLRLNOAGCLFLLQFVEIGSNWGMATPDSAANVOSELIQIN	363
Db	307	QRVVCLVADKSGSMASBDRFLQNMNOAELIYQYIEKSGLVGMVTPDSVAELQHNLRIT	366
OY	364	SGSDRDTLAKRLPAAASGSGTISGSLNSAF-TVIRKKYPTDQSEIVLLTDEGNTISGCF	422
Db	367	DDNYQKITYAKLPOVANCGTISICGLKAGFQAIISHDOSTSGSEIILLTQGENEINSCF	426
OY	423	NEVYOSGAIHTHTVALGPPAOLELELSKMGGLQTYASDQUNQNGILDAFGALSSNGAV	482
Db	427	EDVKRSGAIHTHTLADGPPAAAELELTKSMGTGGYFPFNKDI--TGLINAFSRISNSGSI	484
OY	483	SQSRIOLESKGLTTONSONGMANGTVIVDSTVGKIDPLFLTITWTPQOILLMDPSSQ--KOG	540
Db	485	TQOALQLESKMLKITGRKRVNGVTPVDSYONDQFFVYTWYIQKPEIYLODPKSKKXTS	544
OY	541	GFVVDK-NTKMAVYLOIPGIAGVFWKYSL--QASSOTLLVTYSRASNAATLPPITYTSK	566
Db	545	DFKEEDKLIRBARLOIPGIAGETGFWTFSLLNNHASSOMLTVYVTRARSPTIPVITAH	604
OY	597	TNKKDSRSPPLVYYANIRGOASPLILASVYALLESVNGKVTLELLDNGADATDDG	656
Db	605	MSQHTAHPSPMVIYAOVSQGFLEVLGISTVAIIETEDGHQVYTELMDNGADGRYAKND	664
OY	657	VYSRYFTFYDINGRYSYKVRALGCVNARRRIVPOQSGALYIPGMIENDEIOWNPRAEI	716
Db	665	IYSRFETDYNGRSLKLVHQAQANNNTARLMLRQPKVKVLVPPVEYENGKILNPRAEV	724
OY	717	NKDDVQKQVCFSTRSSGGSFVASDV-PNABIPDLFPPGQITDLKALITHGSLINLTWTA	775
Db	725	KDILAKAKIEDFESRLTSGSFTVSGAPPGNHPVPFPPSKITDLEAKF-EDYIOLISMTA	783
OY	776	PDDYDHGTA 785	
Db	784	PGNVLDKGA 793	

```

      8
US-09-193-562D-32
: Sequence 32, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedicht U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193.562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065,922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 32
: LENGTH: 943
: TYPE: PRT
: ORGANISM: Homo sapiens
US-09-193-562D-32

Query Match          41.8%; Score 1987.5; DB 4; Length 943;
Best Local Similarity 45.3%; Pred. No. 7e-164;
Matches 413; Conservative 163; Mismatches 281; Indels 55; Gaps 20,

```

```

Db      8 GPICMIKFEVTLT---VALSELPELAGVYQLODNGYNGLLAIINPOVENONLSNIKE 63
Qy      56 MYTQASLILFEATGKRFYFNKNAIILPEYWKAKDYVRKLETYKNAVLYAESIPPCMD 115
Db      64 MITTEASFYLFNATKRVEFRNIKILIPATWKAN--NSKIKOSEYKAKANYIVDMGAGHD 122
Qy      116 EPTYQMGCGEKGGERIHLTPDFIAGKRL-AEYGPQAFVHEMHLRMGVDEXNNDKE 174
Db      123 DPTIQYKCGCGEGKIHTTPNFPLNDNLTAQSGRGRFVHEMHLRMGVDEXNNDKEP 182
Qy      175 FYLS-NGRIQAVRCSAGITGNVVKCOGSCYTRKCFENKVTGLYEKCEFLVLRQTE 233
Db      183 FYINGONQIKVTRCSSDITGIFV---CEKGPCOEKCIISK---LFEKCEFTIYNSTQNA 236
Qy      234 KASIMFAQHVDSIVFECHEONHNKAPNQNOKNCRSMWEYIRSEDPKATTPM--TIQ 291
Db      237 TASIMFQSLSSVVEFCNASTHNOAPNLQNMCSLRSMADVITDSADHSHSPMNGEEL 296
Qy      292 PENPFFSLQIGORIVCLVLDKSGMATGNRLNLNOAGOLFLOVETELGVMWMTFDS 351
Db      297 PPPFFSLVQAGDKVCLVLDVSSKMAEDRLLOQAAEFLMOIVELHTVGLASDFS 356
Qy      352 AAHVQSELIQINSQSDRDTLAKRLPAASGCT--SICSGLSAFTYIRK-KYPTDGSSEIV 408
Db      357 KGEIRAOHLQINSNDRKRLVSLPTVSAKDISISGLKGFVEYERKLNGKAYGSVMI 416
Qy      409 LLTQEDMTISGCFNEVQSGAIHTHVALGPSAOLELELSKMTGLOQYVADQVONNL 468
Db      417 LVTSGDDKLGLGCLPTVLSGSGTISHIALGSSAAPNLELSRLTGKLFEPVDISNSNM 476
Qy      469 IDAFALSSGNGAVSQRSTQLESKGLTLQNSQMMNGTVIVDSTVGKDTFLITM--TTOPP 527
Db      477 IDAFRISSGCTDITQOHQLESTGENVKRPHQKNTYVDMTVGNDIMFLVWQASGPP 536
Qy      538 QLLMDPSGQK--QGFYVVDKNTKNAVLQIPGIARVGTWKYSL---QASSQTLTLVTISR 582
Db      537 ELLILDPRGKRYTNNFTTNLTFTASLMIPTGAKPGHMTYTLNMTHSLQALKTYVTSR 596
Qy      593 ASNATLPTITVSKNTKNTSKRPSPLVYVANTROGASPLIRASVAILBSVNGKVTLEL 642
Db      597 ASNSVNPATVYAEVEROSLHPHPMITYANVKGFTPLINVTATVAPETGDPVTLTL 656
Qy      643 LDNGAGADATKDDGYSRFTTYDNGRYSVKRALGVNARRRVIPOQ---SGATXI 698
Db      657 LDGAGADYINKNDGYSRFTSFANGRSLKVH---VNHSPSISTRAHSLPGSHAMVY 712
Qy      699 PGWINDETIQWNPPEPEINKDQYKQVCFESRTSSGGSFVADVPNAPIPDLFPPQITD 758
Db      713 PGYTANGNIOMNAPRKRSVGRNEEERKM--GFSRVSSGGSFVGVAPGPHDVPFCKIID 771
Qy      759 LKAETHGSLINLWTAPGDQDVGHTAHHYIIRISTSLIDLDKFNESIQVNTALIPKE 818
Db      772 LEA-VKVEBELTSLMTAPGEDPDQOATSYELTRMSKSLQIDDFNNALVNTSKRNPOQ 830
Qy      819 ANSEVFLFKPENITFENGTD-----LFIAIOAVDKVDLKEISINARVSLFI 866
Db      831 AGIREITFTFSPDIST--NGPEHQNGETHESHRIYVAILRAMDRNSLQSVASVIAQAPLFI 888
Qy      867 PPGQTPPEPPSPD 878
Db      889 PPNSDP-VPARD 899

```

```

RESULT 9
US-08-469-667-9
; Sequence 9, Application US/08469667
; Patent No. 5733748
; GENERAL INFORMATION:
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Rosen, Craig
; TITLE OF INVENTION: Colon Specific Genes and Proteins
; NUMBER OF SEQUENCES: 24

```

```

CORRESPONDENCE ADDRESS:
ADDRESSER: Carella, Byrne, Bain, Gilfillan, Cecchi,
ADDRESSEE: Stewart & Olstein
STREET: 6 Becker Farm Road
CITY: Roseland
STATE: NJ
COUNTRY: USA
ZIP: 07068-1739
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,667
FILING DATE: 06-JUN-1995
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Ferraro, Gregory D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 325800-435
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 228 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-469-667-9

Query Match      25.3%; Score 1203; DB 1; Length 228;
Best Local Similarity 100.0%; Pred. No. 1.2e-96;
Matches 228; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      657 VYSRYFTTYDINGRYSVKYRALGVNAARRRYIPQSGALYIPGWIENDEIQWNPPEPI 716
Db      1 VYSRYFTTYDINGRYSVKYRALGVNAARRRYIPQSGALYIPGWIENDEIQWNPPEPI 60
Qy      717 NKDDVOHKQVCFSSRTSSGGSFVASDVNPAPIPDLFPPQITDLKAEIHGSLINLTWAP 776
Db      61 NKDDVOHKQVCFSSRTSSGGSFVASDVNPAPIPDLFPPQITDLKAEIHGSLINLTWAP 120
Qy      777 GDDYHGTAHKYIIRISTSLIDLDKFNESIQVNTALIPKEANSEVFLFKPENITFEN 836
Db      121 GDDYHGTAHKYIIRISTSLIDLDKFNESIQVNTALIPKEANSEVFLFKPENITFEN 180
Qy      837 GTDLFIAIOAVDKVDLKEISINARVSLFIPTQTPPEPPSPDSETSAPC 884
Db      181 GTDLFIAIOAVDKVDLKEISINARVSLFIPTQTPPEPPSPDSETSAPC 228

RESULT 10
US-09-224-110-9
; Sequence 9, Application US/09224110
; Patent No. 6337195
; GENERAL INFORMATION:
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Rosen, Craig
; TITLE OF INVENTION: Colon Specific Genes and Proteins
; NUMBER OF SEQUENCES: 24
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,
; ADDRESSEE: Stewart & Olstein
; STREET: 6 Becker Farm Road
; CITY: Roseland
; STATE: NJ
; COUNTRY: USA
; ZIP: 07068-1739
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible

```

```

1 OPERATING SYSTEM: PC-DOS/MS-DOS
2 SOFTWARE: PatentIn Release #1.0, Version #1.30
3
4 CURRENT APPLICATION DATA:
5   APPLICATION NUMBER: US/09/224,110
6   FILING DATE:
7   CLASSIFICATION:
8   PRIOR APPLICATION DATA:
9     APPLICATION NUMBER: 08/469,667
10    FILING DATE: 06-JUN-1995
11    ATTORNEY/AGENT INFORMATION:
12      NAME: Ferraro, Gregory D.
13      REGISTRATION NUMBER: 36,134
14      REFERENCE/DOCKET NUMBER: 325800-435
15    TELECOMMUNICATION INFORMATION:
16      TELEPHONE: 201-994-1700
17      TELEFAX: 201-994-1744
18    INFORMATION FOR SEQ ID NO: 9:
19      SEQUENCE CHARACTERISTICS:
20        LENGTH: 228 amino acids
21        TYPE: amino acid
22        TOPOLOGY: linear
23
24 MOLECULE TYPE: protein
25
26 US-09-224-110-9

```

Db 187 CSTTGTGINVVKKCPGGGCSITSLCRDSDQTGLYEAKCFELPKKSQJAKESIMEMPSLHS 246

Qy 246 IVEFTEQNHNKEARNKQKNLNSTWEYINDSEFPKKTPMT--TQPPNPFPSLLQIG 303  
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:  
Db 247 VTEFTETHTHNEAPNLQKCMCGKSTWIDVIMNSVDFOINTPMENPPTHTPFSLLSK 306  
||:|||||||||:  
Db 307 QRVGVLTLDKSGSMS 321

Qy 304 QRIVCLVLDRKSSGMA 318  
||:|||||||||:

SURF 13  
US-09-193-562D-3  
; Sequence 3, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict H.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; PRIORITY FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIORITY FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 3  
; LENGTH: 203  
; TYPE: PRT  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: Lu-ECAM-1 associated protein from bovine endothelial cells  
US-09-193-562D-3

Query Match 8.6%; Score 408; DB 4; Length 203;  
Best Local Similarity 48.6%; Pred. No. 1.4e-27;  
Matches 84; Conservative 32; Mismatches 55; Indels 2; Gaps 2;

Qy 696 LYIPGIENDELQWNPPEINKDDYQHLYOVCSFKTSFGGSFYASDY-PNAPIPLDFEPG 754  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:  
Db 2 LVPGVGVEGKIILNPPEVKKDKIAKIEDFSRLTGGSFVSAGAPGNHPSPVP 61  
|||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

Qy 755 QTDDKAIEHGSLINLWTAPGDYDHGAHKIIRISISILDLRKFNESLQVNTAL 814  
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:  
Db 62 KITDLFAKK-BDYIDLSTAPGNVLDKKGANSYIIRISISFDRODPFNATLVNTLS 120  
:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

Qy 815 IPKEASEEVLFPKPENTFENGTDLFIAIQAVDKVLDKSEINARVSLFIP 867  
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:  
Db 121 IPKEAGSKNEFEFFKPEHFVENCTKIFYISVAINEANLISEVSHIVAIKIFIP 173  
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:

SURF 14  
US-09-268-347-36  
; Sequence 36, Application US/09268347  
; Patent No. 6335182  
; GENERAL INFORMATION:  
; APPLICANT: Loomore, Sheena M.  
; TITLE OF INVENTION: RECOMBINANT HAEMOPHILUS INFLUENZAE ADHESIN PROTEINS  
; FILE REFERENCE: 1038-860  
; CURRENT APPLICATION NUMBER: US/09/268,347  
; PRIORITY FILING DATE: 1999-03-16  
; NUMBER OF SEQ ID NOS: 54  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 36  
; LENGTH: 2411  
; TYPE: PRT  
; ORGANISM: Haemophilus influenzae  
US-09-268-347-36

Query Match 3.0%; Score 143; DB 4; Length 2411;  
Best Local Similarity 19.8%; Pred. No. 0.0099;  
Matches 161; Conservative 105; Mismatches 308; Indels 240; Gaps 40;

Qy 84 TWKTADYVRPKLEYTKNADVLAESTPPGNDPEYT-EQMGNGCEGKERIHLPDTLAGK 142

```

Db      425  SWKAAE-----ADPDTGDALEGISKDEQVAGE-----TVTFKAGK 461
Oy      143  KLAETFGQGAFFVHE-----WAHLRMGVFDEYNNDKFFYLS-NGRIQAVRCSAGITGT 194
Db      462  NL-FVKQDGNFNFTYSLODALTGLTSLITIGGTTNGGDADATVINKGCLITTPAGNGGTTGT 520
Oy      195  NVVKKCGGSGCYTRKCFNKFNVTGL--YEKGCEFFVLOSROTEKASIMFAOHVDSIVEFCTE 252
Db      521  NTISVTDGKIKAGNKATNTYASGLRAYDANDENVLNSMTD-----LNRHVEDAKGLL- 574
Oy      253  QNHKKEAPNKONOKCNLRSTWEVIRDSDEPKTTPTTQPPNPPTSLQIGORIYCLVLD 312
Db      575  -NLNEKNANKO-----PLVDTSTAATYQDL--RKLGWVYST 607
Oy      313  KSGSMANGNRLNRLNOAGOLFLLQYVELGSWGWVTFDSAIVQSELQI--NSG 365
Db      608  KNG---TKRESNOVKQADEV-----LFTGACAAATVTSKSENGKHTTIYSVAETKADSG 657
Oy      366  -SDRDTLAKRLP-----AAASGTSICSGLSAFTVIRKKYPTDGSSEIVLLTJDEG 415
Db      658  LEKGDGTFIKLVNDQNTDNLVTFVGNNGTAVTKG---GFETV-KTATDADR-----GKV 707
Oy      416  NTISGCENVEKQSAITHYTAALPSPAQOELELSKMTGSLQTYASDAQVONNGLIDAFGL 475
Db      708  TVKDATANADKKAIVAKDVAITAINSAATFVKENTLTSID--EDNPIDNGKD--AL 761
Oy      476  SSGN---GAVSQRSLQLESKGLTL--ONSQMMNGTVIVDSTVGKDTLFLITTTTOPQ 528
Db      762  KAGTLPFFKAGKNLKVARDCKNITPDLAKLKVTAKVASDITLIGNT--PTGCTTAPRK 819
Oy      529  I-----LMDPSQOKGGFY--VDKNTMAALQ 554
Db      820  VNTISTADGLNFAKETADASGSKNVYLKGIATTLTPEPSAGAKSSHLDVNDVTKKSNAS 879
Oy      555  IPIAKYGTWMTYSLOASSQTLTLTVTSRASMAT-----PPITVTSKTNKDSKRPSELY 609
Db      880  IEDVLRAG---WNIGGNGNVVDYVAIYDYNFLDSDGTITVTVYQKADGK----- 928
Oy      610  VYANIRQAGASPLRASYATALIESYNGKYTV-LELDNGAGADATKDC-----VYSRY 661
Db      929  -ADVKGICAK-----TSVIKDHNGKLFPGKDKLDANNAGAVSEBDCDGTGTLVTAK- 978
Oy      662  FTYTDNGRGSYVKYRALG-----GVNARRRVTPQSGALYIPGWIEDEIQMNPFR 713
Db      979  -TVYDAVNKSGWRVTEGCATAETGATRAVNAAGAEIYTSISVNFKNG-----NAT 1028
Oy      714  PEINKD-----DY-----OHKOYCFESRIS--SGGSFV---ASDVNPAPIPD 749
Db      1029  ATVSKDNGNINVKYDVNVGDGLKIGDCKKIVADPTTLTVTGKGVSVAPAGANSVNN----- 1083
Oy      750  LFPPGQITDLKAEIHGSSLINLMTWAPAGQDYDHG 783
Db      1084  -----NKKLVNABGLATLALNNLSMTAKADKYADG 1112

RESULT 15
US-08-728-470-10
; Sequence 10. Application US/08728470
; Patent No. 5928651
; GENERAL INFORMATION:
; APPLICANT: Barenkamp, Stephen J
; TITLE OF INVENTION: High Molecular Weight Surface Proteins
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Shoemaker and Mattare, Ltd.
; STREET: 2001 Jefferson Davis Hwy., 1203 Crystal Plaza
; STREET: Bldg. 1
; CITY: Arlington
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22202-0286
;
;
;

```

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/728,470  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/302,832  
FILING DATE: 16-MAR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US PCT/US93/02166  
FILING DATE: 16-MAR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9205704.1  
FILING DATE: 16-MAR-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Berkstresser, Jerry W  
REGISTRATION NUMBER: 22,651  
REFERENCE/DOCKET NUMBER: 1038-633  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (703) 415-0810  
TELEFAX: (703) 415-0813  
INFORMATION FOR SEO ID NO: 10:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1529 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-728-470-10

Query Match 3.0%; Score 140.5; DB 2; Length 1529;  
Best Local Similarity 20.9%; Pred. No. 0.0076;  
Matches 142; Conservative 94; Mismatches 279; Indels 165; Gaps 29;

QY 281 DFKKTPMTQPPNPTSLQIGRIYCLVLDKSGSMATGRNLR-----LNQAGQ 331  
DB 14 DGNKTTIRNSVNAIINKQFNIDONEMEQPLQESSNSAVERNVSDQISQLKGIIDNSGQ 73  
QY 332 LFLQ---TVELGSWGYTFD-SAAVOSSELIQINSQSDRDLAKRLPAASGGSITC 386  
DB 74 VFLINPGIITIGDAIINTNGFTASTIDISNENKARNFTLEQTKDAIAETVNHGL-IT 132  
QY 387 SGLRSFTYIRKKYPD-----GSEIVLLTDEGNTISGCFNEVKOSGALIIHTVALPS 440  
DB 133 VGRDGSYNLIGKVKNGVLSVNGSGISLA-GQKITISDIINP-----FTYSIAAPEN 186  
QY 441 AAOELELSKMTGGLQTYASDQVONNGLI--DAFGALSSGNGAVSORSIOLESKG-LTLQ 497  
DB 187 EAINLGDIFAKGGINVRAA-TIRNKGKLSADSVSKDSGNIVLSAKEGEAEIGVISAQ 245  
QY 498 NSOMMNGTIV-----DSTVGKDLFLITWTTPPQI 529  
DB 246 NQAKGKGLMITGDKVLTGCAVIDLSGKEGETYLGDEGESEKNGIOLAKKTTLEKGS 305  
QY 530 LMDPSGQKOG-----FVYDKNTKMAVLIPIGIKVGTVKYSLOASSQTLTL----- 577  
DB 306 TI-NVSGKEKGRAIYMGDIALIDGININ---AQGSDIAKTGCF--VETSGHDSIGDDY 358  
QY 578 -----TVTSRASNAIPLPIYTSKTNKDTSK--FPSPLYVTANIRQG 617  
DB 359 IYDAKELWLDPPDVSIETLISGRNNTGENOGYTTGDTKESPKGNSISKPTLTNSTLEQ- 417  
QY 618 ASPLIRASVATLIESVNGKTYTLEL-LDNGAGADATKDDGVYSRYFTTYDNGRYSVKR 676  
DB 418 ---ILRGSYVNTANNRITYNSSINLSNGSLTLHTKRDGVKINGDITTSNENGLTIKAG 474  
QY 677 ALGCVNAARRVYIPOQSGALYIPGMIENDEIOWNPPRPE-----INKDD 720  
DB 475 SWVDVH-----KNITLGTGFLINI--VAGDSVAFFREGDKARNATDAQITAGCTTVNKDD 527

QY 721 VOHK--OVCESTRSSGGSFVASDVPMNPIDLPFPGQIT---DLKAEIHGGSILNT--- 772  
DB 528 KQFFNNVNSINGTGKGLKFIANQ-----NNFTHKFDDELINSGIVTINQTTKK 575  
QY 773 ---WTAPGDDYDH-----GTAKHY---IIRLSTSLDLRDKFNSLOYNTTALIPKE 818  
DB 576 DVRYWNASKDSYWNVSSITLNTVQKFTFIKFDVSGSNSQDLRSSRSPAGVHFNIGGKT 635  
QY 819 -----ANSEYFLFKPENIT 833  
DB 636 NFNIGANAKALEKLPMAAT 655

Search completed: October 17, 2002, 18:57:16  
Job time : 23 secs

**This Page Blank (uspto)**

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 ; Search time 6.26368 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-1  
Perfect score: 391  
Sequence: 1 GAATCAGCAGGAGATGTAC.....ATCTGTGATCTGTTGAAG 223

Scoring table:  
BLOSUM62  
Xgapop 10.0, Xgapext 0.5  
Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 08  
Maximum Match 1008  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+np2p.model -DEV=x1h  
-O=/cgn2\_1/USPTO.spool/US09049696/Runat\_16102002\_115821\_24739/app\_query.fasta.1.13694  
-DB=Issued\_Patents\_AA-QMPT-fastan-SUFFIX=ra1-MINMATCH=0.1-LOOPCL=0  
-LOOPEXT=0-UNITS=bits-START=1-END=-1-MATRIX=bloum62-TRANS=human40.cdi  
-LIST=45-DOCCALIGN=200-THR=score-pct-THR MAX=100-THR MIN=0-ALIGN=15  
-MODE=LOCAL-OUTFMT=ptc-NORM=ext-HEAPSIZE=500-MINLEN=0-MAXLEN=2000000000  
-USER=US09049696.GCGN.1.1-57-errnat.16102002\_115821\_24739-NCPU=6-ICPU=3  
-NO\_XLPHY-NO\_MMAR-LARGEQUERY-NEG\_SCORES=0-WAIT-LOGLOG-DEV.TIMEOUT=120  
-WARN\_TIMEOUT=30-THREADS=1-XGAPOP=10-XGAPEXT=0.5-FGAPOP=6-FGAPEXT=7  
-YGAPOP=10-YGAPEXT=0.5-DELOP=6-DELEXT=7

Database :

1: Issued Patents AA:\*  
2: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/PCtus.COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	328	83.9	914	4	US-09-193-562D-28
2	187.5	48.0	902	4	US-09-193-562D-34
3	187.5	48.0	903	4	US-09-193-562D-36
4	187	47.8	1000	4	US-09-193-562D-46
5	181.5	46.4	342	4	US-09-193-562D-13
6	181.5	46.4	795	4	US-09-193-562D-11
7	181.5	46.4	821	4	US-09-193-562D-12
8	181.5	46.4	905	4	US-09-193-562D-2
9	148.5	38.0	943	4	US-09-193-562D-32
10	62.5	16.0	81	4	US-09-129-030-42
11	61.5	15.7	270	4	US-09-082-593-10
12	61	15.6	606	2	US-08-883-534-3

13	61	15.6	606	3	US-09-204-764-3	Sequence 3, Appl1
14	60.5	15.5	142	4	US-08-945-983-7	Sequence 7, Appl1
15	60.5	15.5	863	2	US-08-666-271-2	Sequence 2, Appl1
16	60	15.3	17	4	US-09-193-562D-15	Sequence 15, Appl1
17	60	14.3	2556	4	US-08-183-432-17	Sequence 17, Appl1
18	58	14.8	126	4	US-08-983-607-26	Sequence 26, Appl1
19	57.5	14.7	693	2	US-08-463-620-11	Sequence 11, Appl1
20	57.5	14.7	693	2	US-08-224-917-11	Sequence 11, Appl1
21	57.5	14.7	693	2	US-08-914-853-11	Sequence 11, Appl1
22	57.5	14.7	693	5	PCT-US95-03934A-11	Sequence 11, Appl1
23	57.5	14.7	2485	4	US-09-290-640-46	Sequence 46, Appl1
24	57	13.6	2556	3	US-08-083-5500A-20	Sequence 20, Appl1
25	57	13.6	2556	3	US-08-532-384-20	Sequence 20, Appl1
26	57	14.6	3135	4	US-08-323-170B-2	Sequence 2, Appl1
27	57	14.6	3135	4	US-08-954-441-2	Sequence 2, Appl1
28	55.5	14.2	513	2	US-09-122-230-7	Sequence 7, Appl1
29	55.5	14.2	935	2	US-08-152-721B-2	Sequence 2, Appl1
30	55	14.1	594	3	US-08-826-964-2	Sequence 2, Appl1
31	55	14.1	1097	2	US-08-680-326-39	Sequence 39, Appl1
32	54.5	13.9	267	1	US-08-416-336-2	Sequence 2, Appl1
33	54.5	13.0	487	1	US-08-218-943-2	Sequence 2, Appl1
34	54.5	13.9	1356	4	US-09-770-170-6	Sequence 6, Appl1
35	54	13.8	189	4	US-08-861-745B-4	Sequence 4, Appl1
36	54	12.9	355	1	US-08-012-988A-2	Sequence 2, Appl1
37	54	12.9	355	1	US-08-450-393A-5	Sequence 5, Appl1
38	54	12.9	355	4	US-08-446-669-5	Sequence 5, Appl1
39	54	12.9	355	4	US-09-239-938-1	Sequence 1, Appl1
40	54	12.9	355	5	PCT-US95-00476-5	Sequence 5, Appl1
41	54	13.8	617	1	US-08-279-700-21	Sequence 21, Appl1
42	54	13.8	922	2	US-08-464-402-2	Sequence 2, Appl1
43	54	13.8	922	4	US-09-054-775C-2	Sequence 2, Appl1
44	53.5	13.7	112	4	US-08-857-076-75	Sequence 75, Appl1
45	53.5	12.8	312	2	US-09-014-969-17	Sequence 17, Appl1

## ALIGNMENTS

RESULT 1  
US-09-193-562D-28  
; Sequence 28, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedict U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193.562D  
; PRIOR FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065.922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 28  
; LENGTH: 914  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-193-562D-28  
  
Alignment Scores:  
Pred. No.: 3.5e-38  
Score: 328.00  
Percent Similarity: 100.00%  
Best Local Similarity: 100.00%  
Query Match: 83.89%  
DB: 4  
Gaps: 0  
  
US-09-049-696-1 (1-223) x US-09-193-562D-28 (1-914)  
QY 25 ATGGGCGCATTAAGAGTCTGTTCATCTTGATCTTCACCTTGAAGGCGCCTG 84  
Db 1 MetGlyProPheLysSerValPheIleuIleuHisLeuIleuGluIleuValLeu 20  
QY 85 ACTAATTCACATGATTCAGCTGAACAACATGCGCTTGAAGCATGCTGTTCAATCGAC 144  
|||||

```
Db 21 SerAsnSerIleuLeuGlnLeuAsnAsnAnglyTyrClnGlyIleValAlaIleAsp 40
QY 145 CCCAATGTCGCCAGACATGTAACACATCATCAACAATAAGACATGGACCCAGCA 204
Db 41 ProAsnValProGlnAspGlnThrLeuIleGlnIleLeuLysAspMetValThrGlnAla 60
QY 205 TCCTGTATCTGTGGAA 222
Db 61 SerIleuTyrIleuPheGln 66

RESULT 2
US-09-193-562D-34
; Sequence 34, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 34
; LENGTH: 902
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.: 3,25e-18 Length: 902
Score: 187.50 Matches: 38
Percent Similarity: 74.24% Conservative: 11
Best Local Similarity: 57.58% Mismatches: 16
Query Match: 47.95% Indels: 1
Gaps: 1

US-09-049-696-1 (1-223) x US-09-193-562D-34 (1-902)
QY 25 ATGGGGCCATTAAAGAGTCTGTGTTCACTTCTTCACTTCTTCAAGAGGGCCCTG 84
Db 1 MetValProGlyLeuGlnValIleuLeuPheLeuThrLeuHisLeuGlnAsnThr 19
QY 85 AGTAATCACTCATTCAGTCGACACAACTATGGAAGCATTCGTTGCAATGCAC 144
Db 20 GluSerSerMetValHisLeuAsnSerAsnGlyTyrGlnGlyValIleAlaIleAsn 39
QY 145 CCCAATGTCGCCAGACATGTAACACATCATCAACAATAAGACATGGACCCAGCA 204
Db 40 ProSerValProGlnAspGlnThrLeuIleProSerIleLeuLysGlnMetValThrGlnAla 59
QY 205 TCCTGTATCTGTGGAA 222
Db 60 SerThrTyrIleuPheGln 65

RESULT 3
US-09-193-562D-46
; Sequence 46, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 46
; LENGTH: 903
; TYPE: PRT
```

```
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Calcium sensitive chloride channel from bovine tracheal
; OTHER INFORMATION: epithelium (Cunningham et al., 1995, J. Biol Chem., 270:31016-
; OTHER INFORMATION: 31026)
US-09-193-562D-46

Alignment Scores:
Pred. No.: 3,25e-18 Length: 903
Score: 187.50 Matches: 38
Percent Similarity: 76.92% Conservative: 12
Best Local Similarity: 58.46% Mismatches: 14
Query Match: 47.95% Indels: 1
Gaps: 1

US-09-049-696-1 (1-223) x US-09-193-562D-46 (1-903)
QY 25 ATGGGGCCATTAAAGTCTGTGTTCACTTCACTTCACTTCAAGAGGGCCCTG 84
Db 1 MetValProArgLeuThrValIleLeuPheLeuThrLeuHisLeuLeuProGly---Met 19
QY 85 AGTAATCACTCATTCAGTCGACACAACTATGGAAGCATTCGTTGCAATGCAC 144
Db 20 LysSerSerMetValAsnLeuIleAsnAnglyTyrAspGlyIleValIleAlaIleAsn 39
QY 145 CCCAATGTCGCCAGACATGTAACACATCATCAACAATAAGACATGGACCCAGCA 204
Db 40 ProSerValProGlnAspGlnThrLeuIleGlnIleLeuLysGlnMetValThrGlnAla 59
QY 205 TCCTGTATCTGT 219
Db 60 SerThrTyrIleuPhe 64

RESULT 4
US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 30
; LENGTH: 1000
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-193-562D-30

Alignment Scores:
Pred. No.: 3,94e-18 Length: 1000
Score: 187.00 Matches: 37
Percent Similarity: 75.81% Conservative: 10
Best Local Similarity: 59.68% Mismatches: 15
Query Match: 47.83% Indels: 0
Gaps: 0

US-09-049-696-1 (1-223) x US-09-193-562D-30 (1-1000)
QY 34 TTTAAGAGTCTGTGTTCACTTCACTTCACTTCAAGAGGGCCCTGAGTAATCA 93
Db 3 PheSerIleuLysValIleLeuPheLeuSerIleuLeuSerProValIleuLysSer 22
QY 94 CTCATTACGTCGACACACAACTATGGAAGCATTCGTTGCAATGCACCCCAATGTG 153
Db 23 LeuValThrLeuAsnAsnAnglyTyrAspGlyIleValIleAlaIleAsnProSerVal 42
QY 154 CCAGAGATGTAACACATCATCAACAATAAGACATGGACCCAGCATCTGTAT 213
Db 154 CCAGAGATGTAACACATCATCAACAATAAGACATGGACCCAGCATCTGTAT 213
```



Pred. No.:	2.23e-17	Length:	795
Score:	181.50	Matches:	35
Percent Similarity:	81.03%	Conservative:	12
Best Local Similarity:	60.34%	Mismatches:	10
Query Match:	46.42%	Indels:	1
DB:	4	Gaps:	1

US-09-049-696-1 (1-223) x US-09-193-562D-11 (1-795)

QY	46	GTGTTCATCTTGATTTCTTCACCTTCTAGAAAGGGCCCTGAGTAATTCATCATTCACCTG	105
DB	8	leupheleuthrlleuHlslleuHlslleuProGly---MellysSerSerMetValAsnleu	26

QY 106 AACACATGCGCTTGAGAGCATGTGCTTCATTCGACCCCAATGTGCGCAGAAAGGAA 165

DB 27 llsnmsnnglyTYraspglylleValllleAllelslsnpProSerValProGluAspGlu 46

QY 166 ACATCTCAATCAACAAATAAAGAGCATGGTGCACCGACGATCTGTATTCGTTT 219

DB 47 lylseuHllegluAsnlllelysgluMetValfhrclunlslaserThrrlyleupne 64

RESULT 7

US-09-193-562D-12

Sequence 12, Application US/09193562D

Patent No. 6309857

GENERAL INFORMATION:

APPLICANT: Pauli, Benedicht U.

TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium

FILE REFERENCE: 18617.0052

CURRENT FILING DATE: 1998-11-17

PRIOR APPLICATION NUMBER: US/60/065,922

PRIOR FILING DATE: 1997-11-17

NUMBER OF SEQ ID NOS: 47

SEQ ID NO 12

LENGTH: 821

TYPE: PRT

ORGANISM: Unknown

FEATURE:

OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells

US-09-193-562D-12

Alignment Scores:

Pred. No.:

Score:

Percent Similarity:

Best Local Similarity:

Query Match:

DB:

2.25e-17	Length:	821
181.50	Matches:	35
81.03%	Conservative:	12
60.34%	Mismatches:	10
46.42%	Indels:	1
4	Gaps:	1

US-09-049-696-1 (1-223) x US-09-193-562D-12 (1-821)

QY	46	GTGTTCATCTTGATTTCTTCACCTTCTAGAAAGGGCCCTGAGTAATTCATCATTCACCTG	105
DB	8	leupheleuthrlleuHlslleuHlslleuProGly---MellysSerSerMetValAsnleu	26

QY 106 AACACATGCGCTTGAGAGCATGTGCTTCATTCGACCCCAATGTGCGCAGAAAGGAA 165

DB 27 llsnmsnnglyTYraspglylleValllleAllelslsnpProSerValProGluAspGlu 46

QY 166 ACATCTCAATCAACAAATAAAGAGCATGGTGCACCGACGATCTGTATTCGTTT 219

DB 47 lylseuHllegluAsnlllelysgluMetValfhrclunlslaserThrrlyleupne 64

RESULT 8

US-09-193-562D-2

Sequence 2, Application US/09193562D

Patent No. 6309857

GENERAL INFORMATION:

APPLICANT: Pauli, Benedicht U.

TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium

FILE REFERENCE: 18617.0052

CURRENT FILING DATE: 1998-11-17

PRIOR APPLICATION NUMBER: US/60/065,922

PRIOR FILING DATE: 1997-11-17

NUMBER OF SEQ ID NOS: 47

SEQ ID NO 2

LENGTH: 821

TYPE: PRT

ORGANISM: Unknown

FEATURE:

OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells

US-09-193-562D-2

Alignment Scores:

Pred. No.:

Score:

Percent Similarity:

Best Local Similarity:

Query Match:

DB:

2.25e-17	Length:	821
181.50	Matches:	35
81.03%	Conservative:	12
60.34%	Mismatches:	10
46.42%	Indels:	1
4	Gaps:	1

US-09-049-696-1 (1-223) x US-09-193-562D-12 (1-821)

QY	46	GTGTTCATCTTGATTTCTTCACCTTCTAGAAAGGGCCCTGAGTAATTCATCATTCACCTG	105
DB	8	leupheleuthrlleuHlslleuHlslleuProGly---MellysSerSerMetValAsnleu	26

QY 106 AACACATGCGCTTGAGAGCATGTGCTTCATTCGACCCCAATGTGCGCAGAAAGGAA 165

DB 27 llsnmsnnglyTYraspglylleValllleAllelslsnpProSerValProGluAspGlu 46

QY 166 ACATCTCAATCAACAAATAAAGAGCATGGTGCACCGACGATCTGTATTCGTTT 219

DB 47 lylseuHllegluAsnlllelysgluMetValfhrclunlslaserThrrlyleupne 64

OY	106	AACAAATGCGTGAAGCATGTGCCTGATCGATCCCAATGCCAAGATGAA	156
Dd	36	GlnaspnsnglytYrasnnglyleuileuilealaleasnProGlnvalPProGlnasngIn	55
OY	166	ACAATCATTCACAACAATAAAGCAGTGATGGACCAGGCATCTGTATCTGTTT	219
Dd	56	AsnleuileSerAsnilleYsglumetilEthrGlnulaSerPheTyrlauphe	73
RESULT 10			
US-09-129-030-42			
; Sequence 42, Application US/09129030A			
; Patent No. 6242221			
; GENERAL INFORMATION:			
; APPLICANT: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION			
; TITLE OF INVENTION: GENOMIC PPO CLONES			
; FILE REFERENCE: 57072-PCT-US			
; CURRENT APPLICATION NUMBER: US/09/129_030A			
; CURRENT FILING DATE: 1998-08-04			
; EARLIER APPLICATION NUMBER: AU PN7856			
; EARLIER FILING DATE: 1996-02-05			
; EARLIER APPLICATION NUMBER: AU PO2361			
; EARLIER FILING DATE: 1996-09-16			
; EARLIER APPLICATION NUMBER: PCI/AU97/00041			
; EARLIER FILING DATE: 1997-01-24			
; NUMBER OF SEQ ID NOS: 66			
; SOFTWARE: PatentIn Ver. 2.0			
; SEQ ID NO 42			
; LENGTH: 81			
; TYPE: PRT			
; ORGANISM: RICE			
US-09-129-030-42			
Alignment Scores:			
Pred. No.:	0.948	Length:	81
Score:	62.50	Matches:	14
Percent Similarity:	55.00%	Conservative:	8
Best Local Similarity:	35.00%	Mismatches:	11
Query Match:	15.98%	Indels:	7
DB:	4	Gaps:	1
US-09-049-696-1 (1-223) x US-09-129-030-42 (1-81)			
OY	97	ATTGAGTGAACAACAATGCGTATGAAGGCAATGTGCTGCATCGAACCCCAATGTCGA	156
Dd	41	LeuaspneusnYtyrsergly-----ThraSprotrIhllPro	53
OY	157	GAAATGAACACATCATTCACAACAATAAAGCACATGCTGACCCAGGCAATCTCTGATCTG	216
Dd	54	GlnaspGlnleuileaspGlnasnlleuylsylewetyrarglinalaSeranHsile	73
RESULT 11			
US-09-082-593-10			
; Sequence 10, Application US/09082593			
; Patent No. 6180104			
; GENERAL INFORMATION:			
; APPLICANT: DAVIS, MARK M.			
; APPLICANT: HEDRICK, STEPHEN M.			
; TITLE OF INVENTION: T CELL RECEPTOR BETA SUBUNIT			
; FILE REFERENCE: DX1193-195Dlv2			
; CURRENT APPLICATION NUMBER: US/09/082_593			
; CURRENT FILING DATE: 1998-05-20			
; NUMBER OF SEQ ID NOS: 15			
; SOFTWARE: PatentIn Ver. 2.0			
; SEQ ID NO 10			
; LENGTH: 270			
; TYPE: PRT			
; ORGANISM: Mus musculus			
US-09-082-593-10			
Alignment Scores:			
Pred. No.:	1.86	Length:	270
Score:	61.50	Matches:	26

Percent Similarity: 47.78% Conservative: 17  
Best Local Similarity: 28.89% Mismatches: 25  
Query Match: 15.73% Indels: 22  
DB: 4 Gaps: 5

US-09-049-696-1 (1-223) x US-09-082-593-10 (1-270)

OY 15 ATGTACACAGAGGGGCGCATTTAGAG-----TTCGTGTTCATCTT----- 56  
DB 70 IIEPESERASNGLYGLULYSGIUGIYARGPHEPHTLEHLSLEASNLYSALASER 89  
OY 57 -----GATTCCTCACCTTCAGAGGGCCCGAGTAATTC 92  
DB 90 LEHHSIPHESELEHLSILEAGSPSERGINPROSER-ASPSERIALALEUTYLEUCY 109  
OY 93 ACTCATTTAGCTG---AACAAACATGGCTATGAA-----GGCATGTCTGCT 134  
DB 109 SALAVAIHLEUTYGTGLYSGYSEGLYASNLYSLEULEPHEGLYTHRGYTHLEULE 129  
DB 135 TGCATCGACCCCGCATGTGCCAGAAAGATGAACACTTCATCAACAATTAAGGACATG 194  
DB 129 USERVALYSPROASNILEGLINASNPROGLNROALAVAIYTGINLEULYASPPROAR 149  
OY 195 GACCCAG---GCATCTCTGTATCTGTTT 219  
DB 149 GSERGLNASPSERTHLEUCYSLERPHE 158

RESULT 12

US-08-883-534-3  
Sequence 3, Application US/08883534  
Patent No. 5846777

GENERAL INFORMATION:

APPLICANT: Bandman, Olga

APPLICANT: Lal, Preeti

APPLICANT: Corley, Neil C.

TITLE OF INVENTION: TWO NEW WD-40 PROTEINS

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESS: Incyte Pharmaceuticals, Inc.

STREET: 3174 Porter Drive

CITY: Palo Alto

STATE: CA

COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

OPERATING SYSTEM: DOS

SOFTWARE: FASTSEQ for Windows Version 2.0

APPLICATION NUMBER: US/08/883,534

FILING DATE:

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

ATTORNEY/AGENT INFORMATION:

NAME: Billings, Lucy J.

REGISTRATION NUMBER: 36,749

REFERENCE/DOCKET NUMBER: PF-0332 US

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-855-0555

TELEFAX: 415-845-4166

TELEX:

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 606 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

IMMEDIATE SOURCE:

LIBRARY: NEUTGMT01

CLONE: 1221143

US-08-883-534-3

Alignment Scores:

Pred. No.: 2.76

Score: 61.00

Percent Similarity: 51.02%

Best Local Similarity: 28.57%

Query Match: 15.60%

DB: 2 Gaps: 0

US-09-049-696-1 (1-223) x US-08-883-534-3 (1-606)

OY 1 GAATACAGAGGAGATGTACAGCATGGGCGCATTTAGAGTTCTGTTCATCTTGAAT 60  
DB 407 ASPVAILGIPROLYSCYVALALAVAILGYPROGLYGYTYRALAVAIYALCYSTILE 426  
OY 61 CTTACCTTCCTAGAGGGGCCCTGAGTAATTCATCTCATTCAGCTGACAAACATGGCTAT 120  
DB 427 GLYINILIEVALLEULELYSASPLNARGLYSCYSPHESERIEASPSANPROGLYTYR 446  
OY 121 GAAGCATTTGCTGTCATCGACCC 147  
DB 447 GIUPROGLUVALALAVAIHISPRO 455

RESULT 13

US-09-204-764-3  
Sequence 3, Application US/09204764  
Patent No. 6025464

GENERAL INFORMATION:

APPLICANT: Bandman, Olga

APPLICANT: Lal, Preeti

APPLICANT: Corley, Neil C.

TITLE OF INVENTION: TWO NEW WD-40 PROTEINS

NUMBER OF SEQUENCES: 6

CORRESPONDENCE ADDRESS:

ADDRESS: Incyte Pharmaceuticals, Inc.

STREET: 3174 Porter Drive

CITY: Palo Alto

STATE: CA

COUNTRY: USA

ZIP: 94304

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

OPERATING SYSTEM: DOS

SOFTWARE: FASTSEQ for Windows Version 2.0

APPLICATION NUMBER: US/09/204,764

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/883,534

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Billings, Lucy J.

REGISTRATION NUMBER: 36,749

REFERENCE/DOCKET NUMBER: PF-0332 US

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-855-0555

TELEFAX: 415-845-4166

TELEX:

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 606 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

IMMEDIATE SOURCE:

LIBRARY: NEUTGMT01

CLONE: 1221143

US-09-204-764-3

Alignment Scores:



Tue Oct 22 11:20:33 2002

us-09-049-696-1.raii

Page 7

Best Local Similarity:	33.33%	Mismatches:	14
Query Match:	15.47%	Indels:	15
DB:	2	Gaps:	3

Mismatches:	14
Indels:	15
Gaps:	3

US-09-049-696-1 (1-223) x US-08-666-271-2 (1-863)

OY	10	GGGAGATACAGCAATGGGCCCATTTAAAGATTCTGTGTC-----	ANCTTG	57
				:
Dd	297	GlyArgCysAsnLeuSerGlyProIleProLysProLeuTrpAsnLeuThrAsnIleVal	:	316
OY	58	ATTCTTCACTT-----CTAGAAGGGCCCTGAGTAATCACACTT-----		99
				:::
Dd	317	PheLeuHisLeuGlyAspAsnHisLeuGluCylProIleSerHisPheMetIlePheGln		356
OY	100	-----CAGCTGAACAACAAATGCCTAATGAAGC	126	
				::::
Dd	337	LysLeuLysArgLeuSerLeuValAsnAsnAsnAsnPheaspGly	350	

Arch completed: October 17, 2002, 17:59:07  
 End time : 9.26368 secs

**This Page Blank (uspio)**

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 : Search time 8.0353 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-1

Perfect score: 223

Sequence: 1 GAATCAGAGGAGATGTAC.....ATCTGTATCTGTTGAAG 223

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Archived: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :  
1: Issued\_Patents\_NA:\*  
2: /cgn2\_6/p/tdata/2/1na/5A\_COMB.seq:\*  
3: /cgn2\_6/p/tdata/2/1na/5B\_COMB.seq:\*  
4: /cgn2\_6/p/tdata/2/1na/6A\_COMB.seq:\*  
5: /cgn2\_6/p/tdata/2/1na/6B\_COMB.seq:\*  
6: /cgn2\_6/p/tdata/2/1na/PCrus\_COMB.seq:\*  
7: /cgn2\_6/p/tdata/2/1na/backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	221.4	99.3	3007	US-09-193-562D-27	Sequence 27, Appl
2	115	51.6	401	US-09-221-298-34	Sequence 34, Appl
3	91	40.8	3317	US-09-193-562D-1	Sequence 1, Appl
4	85.2	38.2	3418	US-09-193-562D-29	Sequence 29, Appl
5	73.8	33.1	3022	US-09-193-562D-33	Sequence 33, Appl
6	50.8	22.8	2970	US-09-193-562D-31	Sequence 31, Appl
7	33	14.8	6924	US-08-015-973-2	Sequence 2, Appl
8	33	14.8	6924	US-08-448-164-2	Sequence 31, Appl
9	31.4	14.1	1876	US-08-466-589-7	Sequence 7, Appl
10	31.4	14.1	1876	US-08-700-636-7	Sequence 7, Appl
11	31.4	14.1	1876	US-08-467-574-7	Sequence 7, Appl
12	31.4	14.1	1876	US-09-217-345-7	Sequence 7, Appl
13	29	13.0	7032	US-09-324-867-1	Sequence 1, Appl
14	27.8	12.5	1438	US-09-187-341-4	Sequence 4, Appl
15	27.8	12.5	1438	US-09-470-946-4	Sequence 4, Appl
16	27.6	12.4	3663	US-09-499-884-11	Sequence 11, Appl
17	27.6	12.4	12720	US-08-403-866-11	Sequence 11, Appl
18	27.4	12.3	1620	5449756-10	Patent No. 5449756
19	27.4	12.3	2306	5198359-3	Patent No. 5198359
20	27.4	12.3	2306	5449756-3	Patent No. 5449756
21	27.2	12.2	6082	US-09-439-313-535	Sequence 535, App
22	27.2	12.2	6140	US-09-439-313-536	Sequence 536, App
23	27.2	12.2	6960	US-08-841-349-3	Sequence 3, Appl
24	27.2	12.2	8176	US-08-841-349-5	Sequence 3, Appl
25	26.8	12.0	549	US-08-851-190-2	Sequence 2, Appl
26	26.8	12.0	2364	US-08-838-219B-5	Sequence 5, Appl
27	26.8	12.0	2364	US-09-233-336A-5	Sequence 5, Appl

C	28	26.8	12.0	2364	3	US-09-233-752A-5	Sequence 5, Appl
C	29	26.8	12.0	2364	4	US-09-402-036-5	Sequence 5, Appl
C	30	26.8	12.0	2612	1	US-08-471-033-31	Sequence 31, Appl
C	31	26.8	12.0	2612	2	US-08-471-044-31	Sequence 31, Appl
C	32	26.8	12.0	2612	2	US-08-463-483A-31	Sequence 31, Appl
C	33	26.8	12.0	2612	2	US-08-471-046A-31	Sequence 31, Appl
C	34	26.8	12.0	2612	2	US-08-470-566B-31	Sequence 31, Appl
C	35	26.8	12.0	2612	2	US-08-838-219B-3	Sequence 3, Appl
C	36	26.8	12.0	2612	2	US-08-469-334-31	Sequence 31, Appl
C	37	26.8	12.0	2612	3	US-09-300-529-31	Sequence 31, Appl
C	38	26.8	12.0	2612	3	US-09-233-536A-3	Sequence 3, Appl
C	39	26.8	12.0	2612	3	US-09-233-752A-3	Sequence 3, Appl
C	40	26.8	12.0	2612	4	US-09-402-036-3	Sequence 3, Appl
C	41	26.6	11.9	1299	1	US-07-688-352C-17	Sequence 17, Appl
C	42	26.6	11.9	1299	2	US-08-474-379C-17	Sequence 17, Appl
C	43	26.6	11.9	1299	3	US-08-146-249A-17	Sequence 17, Appl
C	44	26.6	11.9	1299	3	US-08-206-188B-17	Sequence 17, Appl
C	45	26.6	11.9	1299	5	PCT-US91-02714-11	Sequence 11, Appl

ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
: Sequence 27, Application US/09193562D
: Patent No. 6309857
: GENERAL INFORMATION:
: APPLICANT: Pauli, Benedict U.
: TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
: FILE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
: FILE REFERENCE: 18617.0052
: CURRENT APPLICATION NUMBER: US/09/193, 562D
: CURRENT FILING DATE: 1998-11-17
: PRIOR APPLICATION NUMBER: US/60/065, 922
: PRIOR FILING DATE: 1997-11-17
: NUMBER OF SEQ ID NOS: 47
: SEQ ID NO 27
: LENGTH: 3007
: TYPE: DNA
: ORGANISM: Homo sapiens
: US-09-193-562D-27

Query Match      99.3%: Score 221.4; DB 4; Length 3007;
Best Local Similarity 99.6%: Pred. No. 6.9e-64;
Matches 222; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 1 GAATCAGAGGAGATGTACGCAATGAGGGCCATTTAGAGCTGCTGTCATCTTGATT 60
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 23 GAATCAGAGGAGATGTACGCAATGAGGGCCATTTAGAGCTGCTGTCATCTTGATT 82

Oy 61 CTTCACCTTCTAGAGGGGCGCTGAGTATTCATCTGATGAGCAACATGCTAT 120
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 83 CTTCACCTTCTAGAGGGGCGCTGAGTATTCATCTGATGAGCAACATGCTAT 142

Oy 121 GAAGCATGTCGTCGCAATGACCCCAATGCGCAGAGAGTGAACATCATCAACAA 180
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 143 GAAGCATGTCGTCGCAATGACCCCAATGCGCAGAGAGTGAACATCATCAACAA 202

Oy 181 ATTAAGACATGTGACCCAGCATCTGATCTGTTGAAG 223
   | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db 203 ATTAAGACATGTGACCCAGCATCTGATCTGTTGAAG 245

RESULT 2
US-09-221-298-34
: Sequence 34, Application US/09221298
: Patent No. 6284241
: GENERAL INFORMATION:
: APPLICANT: Xu, Jiaqichun
: TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY AND DIAGNOSIS
: FILE REFERENCE: 210121.471
```

;; CURRENT APPLICATION NUMBER: US/09/221,298  
;; CURRENT FILING DATE: 1998-12-23  
;; NUMBER OF SEQ ID NOS: 112  
;; SOFTWARE: FastSeq for Windows Version 3.0  
;; SEQ ID NO 34  
;; LENGTH: 401  
;; TYPE: DNA  
;; ORGANISM: Human  
US-09-221-298-34

Query Match 51.6%; Score 115; DB 4; Length 401;  
Best Local Similarity 100.0%; Pred. No. 5.2e-29;  
Matches 115; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 109 AACAAAGCGATGAGGATGCTGCTGCAATGACCCCAATGCGCAGAGATGAACA 168  
DB 1 AACAAAGCGATGAGGATGCTGCTGCAATGACCCCAATGCGCAGAGATGAACA 60

QY 169 CTCATTCAACAAATTAAGGACATGTGACCCAGCATCTCTGATCTGTTGAAG 223  
61 CTCATTCAACAAATTAAGGACATGTGACCCAGCATCTCTGATCTGTTGAAG 115

RESULT 3  
US-09-193-562D-1  
; Sequence 1, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 1  
; LENGTH: 3317  
; TYPE: DNA  
; ORGANISM: Unknown  
; FEATURE:  
; OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated  
; OTHER INFORMATION: protein from bovine endothelial cells  
US-09-193-562D-1

Query Match 40.8%; Score 91; DB 4; Length 3317;  
Best Local Similarity 66.7%; Pred. No. 1.2e-20;  
Matches 146; Conservative 0; Mismatches 70; Indels 3; Gaps 1;

5 TCACAGGAGATGTACAGCAATGGGCGCATTTAAGATCTGTTTCATCTTGATCTTC 64  
DB 43 TTACTGTAAATGTGCAAAATGTGTCTGTCTGATGTATTCTCTCTTAACCTTGC 102  
QY 65 ACCTTCTAGAAGGGCCCTGAGTAATTCACCTCATTCAGTGAACAACATGGCTATGAAG 124  
DB 103 ATCTCTTGCTCTG---AATGAAAGTTCAATGTAAATTGATTAACAATGGGATGATG 159  
QY 125 GCATTGTGCTGCAATGACCCCAATGTGCCAGAGATGAACAACATCATTCACAAATTA 184  
DB 160 GCATTGTGCTGCAATTAACCCAGAGTGTGCCAAGATGAAGAAACATCATTAACATTA 219  
QY 185 AGGACATGGTGAAGGACGATCTCTGATCTGTTGAAG 223  
DB 220 AGGAAATGTAAGTGAAGCTTCTACTTAACCTGTTTCATG 258

RESULT 4  
US-09-193-562D-29  
; Sequence 29, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.

;; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
;; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
;; FILE REFERENCE: 18617.0052  
;; CURRENT APPLICATION NUMBER: US/09/193,562D  
;; CURRENT FILING DATE: 1998-11-17  
;; PRIOR APPLICATION NUMBER: US/60/065,922  
;; PRIOR FILING DATE: 1997-11-17  
;; NUMBER OF SEQ ID NOS: 47  
;; SEQ ID NO 29  
;; LENGTH: 3418  
;; TYPE: DNA  
;; ORGANISM: Homo sapiens  
US-09-193-562D-29

Query Match 38.2%; Score 85.2; DB 4; Length 3418;  
Best Local Similarity 67.4%; Pred. No. 9.9e-19;  
Matches 120; Conservative 0; Mismatches 58; Indels 0; Gaps 0;

QY 46 GTGTCATCTGTAATTCCTTACCTCTAGAAAGGCCCTGAGTAATTCACCTCAGCTG 105  
DB 37 GTGATCTCTCTCCTATCTGCTTCTCTCGCTGTATGAAAAGCTCAGCTGTAACCTTG 96  
QY 106 AACACAAATGGCTATGAAGCATGTGCTGCAATGACCCCAATGCGCAGAGATGA 165  
DB 97 AATTAACAATGAGATGATGATGCAATTAATCCAGTGTACCAAGATGA 156  
QY 166 ACACATTCACAAATTAAGGACATGTGACCCAGCATCTCTGATCTGTTGAAG 223  
DB 157 AACTCATTCACAAATTAAGGAAATGTATACAGACATCTACTGCTGTTTCATG 214

RESULT 5  
US-09-193-562D-33  
; Sequence 33, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; FILE REFERENCE: 18617.0052  
; CURRENT APPLICATION NUMBER: US/09/193,562D  
; CURRENT FILING DATE: 1998-11-17  
; PRIOR APPLICATION NUMBER: US/60/065,922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 33  
; LENGTH: 3022  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-09-193-562D-33

Query Match 33.1%; Score 73.8; DB 4; Length 3022;  
Best Local Similarity 72.2%; Pred. No. 5.6e-15;  
Matches 96; Conservative 0; Mismatches 37; Indels 0; Gaps 0;

QY 91 TCACATTCAGCTGGAACAATGGCTATGAAGGATGCTGTTCAATGACCCCAAT 150  
DB 81 TCCATGGTGATCTCAACAGCAATGATGAGAGGTGTGATTCATTCATTAACCCCAAT 140  
QY 151 GTGCCAGAGATGAAGAACTCATTCACAAATTAAGGACATGTGACCCAGGATCTTG 210  
DB 141 GTGCCAGAGAGCAAGAGGCTCATCCCAAGCATTAAGAAATGTATCACTCAAGCTTCAAC 200  
QY 211 TATCTGTTGAAG 223  
DB 201 TACCTGTTGAAG 213

RESULT 6  
US-09-193-562D-31  
; Sequence 31, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:



Query Match	14.85;	Score 33;	DB 2;	Length 6924;
Best Local Similarity	49.7%;	Pred. No. 0.27;		
Matches 84; Conservative	0;	Mismatches 85;	Indels 0;	Gaps 0

QY 53 TCTTGATTTCTTCACTCTTGAAGGGCCCTGAGTAATTCATCTCATCTGACGTGAACACA 112  
|||||  
DB 5927 TCTTCACTTCAATGATACACTGTGTGAGCCCACTACTAGTAAGAAACAGAGGTGGACA 5986  
QY 113 ATGGCTATGGAAGCATTGTGCTTGCATTCAGACCCCAATGTGCCAAGAATGAACACTCA 172  
|||||  
DB 5987 GTCATATTCATGCTGCTTAATGCACTCTCATCTTCTGTGACGACGAGCAAAACAAGC 6046  
QY 173 TTCAACAAATAAAGACATGATGACCCAGCAGCTCTGTATCTGTTGA 221  
|||||  
DB 6047 TAGAGAAACAATTCACACTCTGTAGCCAGTCAATATATACAGACAGATGA 6095

## RESULT 9

US-08-466-589-7  
; Sequence 7, Application US/08466589  
; Patent No. 5837489  
; GENERAL INFORMATION:  
; APPLICANT: Elliot, Kathryn J.  
; APPLICANT: Ellis, Steven B.  
; APPLICANT: Harpold, Michael M.  
; TITLE OF INVENTION: HUMAN NEURONAL NICOTINIC ACETYLCHOLINE  
; TITLE OF INVENTION: RECEPTOR COMPOSITIONS AND METHODS EMPLOYING SAME  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Brown, Martin, Haller & Mcclain  
; STREET: 1660 Union Street  
; CITY: San Diego  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 92101-2926  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq Version 1.5  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/466,589  
; FILING DATE: June 5, 1995  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/028,031  
; FILING DATE: March 8, 1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Seidman, Stephanie L.  
; REGISTRATION NUMBER: 33,779  
; REFERENCE/DOCKET NUMBER: 6362-9950  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 619-238-0999  
; TELEFAX: 619-238-0062  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1876 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: both  
; TOPOLOGY: both  
; MOLECULE TYPE: CDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 73..1581  
; US-08-466-589-7

Query Match 14.1%; Score 31.4; DB 2; Length 1876;  
Best Local Similarity 57.7%; Pred. No. 0.51;  
Matches 56; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

QY 57 GATCTTCACCTTCTAGAGGGCCCTGAGTAATTCATCTGAGTGAACAACAATGG 116  
|||||  
DB 366 GACGTTCGTTCCAGATGGCCAGATTGTGAACACGACATCTCTCTATAACAGTGC 425  
QY 117 CTATGAAGGCAATGTCTGTAATGACCCCAATGTG 153  
|||||

DB 426 TGATGAGCGCTTGGACGCCACATTCACACTAAGTGTG 462

## RESULT 10

US-08-700-636-7  
; Sequence 7, Application US/08700636  
; Patent No. 5910582  
; GENERAL INFORMATION:  
; APPLICANT: Elliot, Kathryn J.  
; APPLICANT: Ellis, Steven B.  
; APPLICANT: Harpold, Michael M.  
; TITLE OF INVENTION: HUMAN NEURONAL NICOTINIC ACETYLCHOLINE  
; TITLE OF INVENTION: RECEPTOR COMPOSITIONS AND METHODS EMPLOYING SAME  
; NUMBER OF SEQUENCES: 12  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Pretty, Schroeder, Brueggemann & Clark  
; STREET: 444 South Flower Street, Suite 2000  
; CITY: Los Angeles  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 90071  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/700,636  
; FILING DATE: 16-JUL-1996  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/028,031  
; FILING DATE: 08-MAR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Reiter, Stephen E.  
; REGISTRATION NUMBER: 31,192  
; REFERENCE/DOCKET NUMBER: P41 9368  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 619-546-4737  
; TELEFAX: 619-546-9392  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1876 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: both  
; TOPOLOGY: both  
; MOLECULE TYPE: CDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 73..1581  
; US-08-700-636-7

Query Match 14.1%; Score 31.4; DB 2; Length 1876;  
Best Local Similarity 57.7%; Pred. No. 0.51;  
Matches 56; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

QY 57 GATCTTCACCTTCTAGAGGGCCCTGAGTAATTCATCTGAGTGAACAACAATGG 116  
|||||  
DB 366 GACGTTCGTTCCAGATGGCCAGATTGTGAACACGACATCTCTCTATAACAGTGC 425  
QY 117 CTATGAAGGCAATGTCTGTAATGACCCCAATGTG 153  
|||||  
DB 426 TGATGAGCGCTTGGACGCCACATTCACACTAAGTGTG 462

## RESULT 11

US-08-467-574-7  
; Sequence 7, Application US/08467574  
; Patent No. 6022704  
; GENERAL INFORMATION:  
; APPLICANT: Elliot, Kathryn J.  
; APPLICANT: Ellis, Steven B.  
; APPLICANT: Harpold, Michael M.

```

TITLE OF INVENTION: HUMAN NEURONAL NICOTINIC ACETYLCHOLINE
TITLE OF INVENTION: RECEPTOR COMPOSITIONS AND METHODS EMPLOYING SAME
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Brown, Martin, Haller & McClain
STREET: 1660 Union Street
CITY: San Diego
STATE: CA
COUNTRY: USA
ZIP: 92101-2926
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/467,574
FILING DATE: June 5, 1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/028,031
FILING DATE: March 8, 1993
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 6362-9949
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-238-0999
TELEFAX: 619-238-0062
TELEX:
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1876 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 73..1581
US-08-467-574-7
Query Match 14.1%; Score 31.4; DB 3; Length 1876;
Best Local Similarity 57.7%; Pred. No. 0.51;
Matches 56; Conservative 0; Mismatches 41; Indels 0; Gaps 0;
57 GATCTTCACCTTCAGAGGGGCCGTGATATTCACCTCATTCAGCGAACACAAATGG 116
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
366 GACGCTTGCTTCCACAGATGGCCAGCATTTGGAAACACAGACATCTTCTTATTAAGTGC 425
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 117 CTATGAAGCATTTGCTGTTGCATTCAGACCCCAATGTG 153
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 426 TGATGAGCGCTTTGACGCCACATTCACACATPAAGCTG 462
RESULT 12
US-09-217-345-7
Sequence 7, Application US/09217345
Patent No. 6303753
GENERAL INFORMATION:
APPLICANT: Eliot, Kathryn J.
APPLICANT: Ellis, Steven B.
APPLICANT: Harpold, Michael M.
TITLE OF INVENTION: HUMAN NEURONAL NICOTINIC ACETYLCHOLINE
TITLE OF INVENTION: RECEPTOR COMPOSITIONS AND METHODS EMPLOYING SAME
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Heller Ehrman White & McCauliffe
STREET: 4250 Executive Square, 7th Floor
CITY: La Jolla
STATE: CA
COUNTRY: USA
ZIP: 92037

```

```

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/217,345
FILING DATE: 21-DEC-98
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/467,574
FILING DATE: 05-JUN-95
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/466,589,
FILING DATE: 05-JUN-95
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/028,031
FILING DATE: 08-MAR-93
ATTORNEY/AGENT INFORMATION:
NAME: Seidman, Stephanie L.
REGISTRATION NUMBER: 33,779
REFERENCE/DOCKET NUMBER: 24735-9949B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-450-8400
TELEFAX: 619-587-5360
TELEX:
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1876 base pairs.
TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: both
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 73..1581
US-09-217-345-7

Query Match 14.1%; Score 31.4; DB 4; Length 1876;
Best Local Similarity 57.7%; Pred. No. 0.51;
Matches 56; Conservative 0; Mismatches 41; Indels 0; Gaps

OY 57 GATCTTCACCTTGTAAAGAGGGCCCTGAGTAATTCATCTATCAGCTGGAACAACTGG 116
    || || || || || || || || || || || || || || || || || || || || ||
DB 366 GACGTCGCTTCCAGATGGCCAGATTGGAAACGAGACATCTCTATAACAGCTG 425
    || || || || || || || || || || || || || || || || || || || || ||

OY 117 CTATGAAGCGATTGTCGTGCAATGCAGCCCAATGTG 153
    || || || || || || || || || || || || || || || || || || || || ||
DB 426 TGATGAGCGCTTTGACGCCACATTCACACTAAGCTG 462
    || || || || || || || || || || || || || || || || || || || || ||

RESULT 13
US-09-324-867-1
Sequence 1, Application US/09324867A
Patent No. 6251632
GENERAL INFORMATION:
APPLICANT: Lillyfrap, David
APPLICANT: Cameron, Cherie
APPLICANT: No. 6251632ley, Colleen
APPLICANT: Horrocks, L. Suzanne Hoyle
APPLICANT: Hough, Christine
TITLE OF INVENTION: Canine Factor VIII Gene, Protein and Methods of Use
FILE REFERENCE: 1669, 0010002/JAG/BJD
CURRENT APPLICATION NUMBER: US/09/324,867A
CURRENT FILING DATE: 1999-06-03
EARLIER APPLICATION NUMBER: 09/035,141
EARLIER FILING DATE: 1998-03-059
EARLIER APPLICATION NUMBER: 60/039,953
NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1
LENGTH: 7032
TYPE: DNA

```

Search completed: October 17, 2002, 10:41:02  
Job time : 18.0353 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - protein search, using frame\_plus\_n2p model

Run on: October 17, 2002, 10:27:54 : Search time 7.66809 Seconds  
(without alignments)  
1739.205 Million cell updates/sec

Title: US-09-049-696-2

Perfect score: 471

Sequence: 1 GTTGCAATGACCCCATGT.....AGATGGCACTGTGGCAG 273

Scoring table:

BLOSUM62  
Xgapop 10.0, Xgapext 0.5  
Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

Searched: 231628 seqs, 2442594 residues

Total number of hits satisfying chosen parameters: 463256

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+ n2p model -DEV=xlh  
-O=/cgn2\_1/USPRO\_pool/US09049696/runat\_16102002\_115821\_24739/app-query.fasta.1.13694  
-DB=Issued\_Patents\_AA -QEMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=Blomsum62 -TRANS=human40.cdl  
-LIST=45 -DOCALLIGN=200 -THR.SCORE=pct -THR.MAX=100 -THR.MIN=0 -ALIGN=15  
-MODE=LOCAL -OUTFMT=ptc -NOR=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000  
-USER=US09049696.ecgn\_1\_1\_57\_@runat\_16102002\_115821\_24739 -NCPU=6 -ICPU=3  
-NO\_XLPHY -NO\_MMAP -LARGEOQUERY -NEG.SCORES=0 -WAIT -LONGLOG -DEV.TIMEOUT=120  
-WARN.TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6 -Fgapext=7  
-YGAOP=10 -YGAPEXT=0.5 -DELop=6 -DELEXT=7

Database :

Issued\_Patents\_AA:\*  
1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PTCUS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/Backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	465	98.7	914	4	US-09-193-562D-28
2	292	62.0	903	4	US-09-193-562D-46
3	288	61.1	342	4	US-09-193-562D-13
4	288	61.1	795	4	US-09-193-562D-11
5	288	61.1	821	4	US-09-193-562D-12
6	287	61.1	905	4	US-09-193-562D-2
7	287	60.9	902	4	US-09-193-562D-34
8	282	59.9	1000	4	US-09-193-562D-30
9	223.5	47.5	943	4	US-09-193-562D-32
10	65	13.8	81	4	US-09-129-030-42
11	64.5	13.7	613	4	US-09-446-504-5
12	64.5	13.7	613	4	US-09-712-266-5

C 13	62	12.6	153	1	US-08-050-319B-52	Sequence 52, Appl
C 14	62	12.6	153	2	US-08-465-982-52	Sequence 52, Appl
C 15	62	12.6	153	2	US-08-219-237B-4	Sequence 4, Appl
C 16	62	12.6	153	4	US-08-477-347-12	Sequence 12, Appl
C 17	62	12.6	153	4	US-08-476-862-3	Sequence 3, Appl
C 18	62	12.6	153	4	US-08-468-560C-4	Sequence 4, Appl
C 19	62	12.6	157	1	US-08-050-319B-50	Sequence 50, Appl
C 20	62	12.6	157	2	US-08-465-982-50	Sequence 50, Appl
C 21	62	12.6	161	4	US-09-326-319B-2	Sequence 2, Appl
C 22	62	12.6	199	1	US-08-050-319B-48	Sequence 48, Appl
C 23	62	12.6	199	2	US-08-465-982-48	Sequence 48, Appl
C 24	62	12.6	280	3	US-08-974-022-4	Sequence 46, Appl
C 25	62	12.6	280	4	US-08-795-445A-46	Sequence 46, Appl
C 26	62	12.6	280	4	US-08-795-447A-46	Sequence 46, Appl
C 27	62	12.6	280	4	US-08-974-186-46	Sequence 46, Appl
C 28	62	12.6	280	4	US-08-795-446B-46	Sequence 46, Appl
C 29	62	12.6	285	4	US-08-804-166-6	Sequence 6, Appl
C 30	62	12.6	285	4	US-08-910-991-6	Sequence 6, Appl
C 31	62	12.6	336	4	US-08-804-166-8	Sequence 8, Appl
C 32	62	12.6	336	4	US-08-910-991-8	Sequence 8, Appl
C 33	62	12.6	453	4	US-09-086-483A-5	Sequence 5, Appl
C 34	62	12.6	453	1	US-08-050-319B-25	Sequence 25, Appl
C 35	62	12.6	455	1	US-08-321-668-2	Sequence 2, Appl
C 36	62	12.6	455	1	US-08-837-941-2	Sequence 2, Appl
C 37	62	12.6	455	2	US-08-126-016-2	Sequence 2, Appl
C 38	62	12.6	455	2	US-08-465-982-25	Sequence 25, Appl
C 39	62	12.6	455	4	US-08-815-469-5	Sequence 5, Appl
C 40	62	12.6	455	4	US-09-006-353A-3	Sequence 3, Appl
C 41	62	12.6	455	4	US-09-527-236A-5	Sequence 4, Appl
C 42	62	12.6	909	4	US-09-013-895A-4	Sequence 4, Appl
C 43	61.5	12.5	256	4	US-08-804-166-2	Sequence 2, Appl
C 44	61.5	12.5	256	4	US-08-910-991-2	Sequence 2, Appl
C 45	61.5	12.5	307	4	US-08-804-166-4	Sequence 4, Appl

#### ALIGNMENTS

RESULT 1

US-09-193-562D-28  
; Sequence 28, Application US/09193562D

; Patent No. 6309857

; GENERAL INFORMATION:

; APPLICANT: Paul, Benedict U.

; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium

; FILE REFERENCE: 18617.0052

; CURRENT APPLICATION NUMBER: US/09/193.562D

; CURRENT FILING DATE: 1998-11-17

; PRIOR APPLICATION NUMBER: US/60/065.922

; PRIOR FILING DATE: 1997-11-17

; NUMBER OF SEQ ID NOS: 47

; SEQ ID NO 28

; LENGTH: 914

; TYPE: PRT

; ORGANISM: Homo sapiens

; US-09-193-562D-28

Alignment Scores:

Pred. No.:

Score:

Percent Similarity:

Best Local Similarity:

Query Match:

DB:

US-09-049-696-2 (1-273) x US-09-193-562D-28 (1-914)

QY 1 GTTGCAATGACCCCATGTGCCAGAGTGAACATCTATTCACCAATAAGACATG 60  
DB 37 VALAIAIIEASPRASVAlProGtunspGuttrIleInIleGInIleIlysaspet 56  
QY 61 GTGACCCAGACATCTGTATCTGTTTGAAGTACAGAAACGATTTATTCAAAAT 120



Best Local Similarity: 59.34% Mismatches: 23  
 Query Match: 4 Indels: 0  
 DB: 4 Gaps: 0

US-09-049-696-2 (1-273) x US-09-193-562D-11 (1-795)

```

OY 1 GTTGCATGACCCCAATGTCGACAGATGAACACATTCATCAACAATAAGGACATG 60
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
DB 36 lIeAlAlIeAsnProSeRvAlProGluAspGluLysLeuIlleGluAsnIlleYsgIuMet 55

OY 61 GTGACCCAGGACATCTCTGATCTGTTTGAAGCTACAGAAAGCATTTTATTTCAAAAAT 120
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 56 ValThhGluAlaSerThrTyrLeuPheHisAlaThrLysArgArgValTyrPheArgAsn 75

OY 121 GTTGCATTTGATTCCTCAAAACATGAGACAAAGNTGACTATGTGAGACCAAACTT 180
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 76 ValSerIleLeuIlleProMetThrTyrLysSerLysSerGluTyrPheIleProLysGln 95

OY 181 GAGACCTACAAAATGCTGATGTCGTCGAGTCTAATCCCTCAGGNATGATGAA 240
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 96 GluSerTyrAspGlnAlaAspValIleValAlaAsnProTyrLeuLysTyrGlyAspAsp 115

OY 241 CCTTACACTGNCAGATGGGCAACTGTGGCGAG 273
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 116 ProTyrThrLeuGlnTyrGlyArgCysGlyGln 126

```

## RESULT 5

US-09-193-562D-12  
 ; Sequence 12, Application US/09193562D  
 ; Patent No. 6309857

; GENERAL INFORMATION:

; APPLICANT: Pauli, Benedicht U.

; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium

; FILE REFERENCE: 18617.0052

; CURRENT APPLICATION NUMBER: US/09/193.562D

; PRIOR FILING DATE: 1998-11-17

; PRIOR APPLICATION NUMBER: US/60/065.922

; NUMBER OF SEQ ID NOS: 47

; SEQ ID NO 12

; LENGTH: 821

; TYPE: PRT

; ORGANISM: Unknown

; FEATURE:

; OTHER INFORMATION: Variant of Lu-ECAM-1 from bovine endothelial cells

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

US-09-193-562D-12

```

Pred. No.: 2,1e-32 Length: 821
Score: 288.00 Matches: 54
Percent Similarity: 74.73% Conservative: 14
Best Local Similarity: 59.34% Mismatches: 23
Query Match: 4 Indels: 0
DB: 4 Gaps: 0

US-09-049-696-2 (1-273) x US-09-193-562D-12 (1-821)

OY 1 GTTGCATGACCCCAATGTCGACAGATGAACACATTCATCAACAATAAGGACATG 60
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 36 lIeAlAlIeAsnProSeRvAlProGluAspGluLysLeuIlleGluAsnIlleYsgIuMet 55

OY 61 GTGACCCAGGACATCTCTGATCTGTTTGAAGCTACAGAAAGCATTTTATTTCAAAAAT 120
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 56 ValThhGluAlaSerThrTyrLeuPheHisAlaThrLysArgArgValTyrPheArgAsn 75

OY 121 GTTGCATTTGATTCCTCAAAACATGAGACAAAGNTGACTATGTGAGACCAAACTT 180
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 76 ValSerIleLeuIlleProMetThrTyrLysSerLysSerGluTyrPheIleProLysGln 95

OY 181 GAGACCTACAAAATGCTGATGTCGTCGAGTCTAATCCCTCAGGNATGATGAA 240
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 96 GluSerTyrAspGlnAlaAspValIleValAlaAsnProTyrLeuLysTyrGlyAspAsp 115

```

```

OY 241 CCTACACTGNCAGATGGGCAACTGTGGCGAG 273
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 116 ProTyrThrLeuGlnTyrGlyArgCysGlyGln 126

```

## RESULT 6

US-09-193-562D-2  
 ; Sequence 2, Application US/09193562D  
 ; Patent No. 6309857

; GENERAL INFORMATION:

; APPLICANT: Pauli, Benedicht U.

; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium

; FILE REFERENCE: 18617.0052

; CURRENT APPLICATION NUMBER: US/09/193.562D

; PRIOR FILING DATE: 1998-11-17

; PRIOR APPLICATION NUMBER: US/60/065.922

; NUMBER OF SEQ ID NOS: 47

; SEQ ID NO 2

; LENGTH: 905

; TYPE: PRT

; ORGANISM: Unknown

; FEATURE:

; OTHER INFORMATION: Lu-ECAM-1 precursor from bovine endothelial cells

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

US-09-193-562D-2

```

Pred. No.: 2,17e-32 Length: 905
Score: 288.00 Matches: 54
Percent Similarity: 74.73% Conservative: 14
Best Local Similarity: 59.34% Mismatches: 23
Query Match: 4 Indels: 0
DB: 4 Gaps: 0

US-09-049-696-2 (1-273) x US-09-193-562D-2 (1-905)

OY 1 GTTGCATGACCCCAATGTCGACAGATGAACACATTCATCAACAATAAGGACATG 60
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 36 lIeAlAlIeAsnProSeRvAlProGluAspGluLysLeuIlleGluAsnIlleYsgIuMet 55

OY 61 GTGACCCAGGACATCTCTGATCTGTTTGAAGCTACAGAAAGCATTTTATTTCAAAAAT 120
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 56 ValThhGluAlaSerThrTyrLeuPheHisAlaThrLysArgArgValTyrPheArgAsn 75

OY 121 GTTGCATTTGATTCCTCAAAACATGAGACAAAGNTGACTATGTGAGACCAAACTT 180
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 76 ValSerIleLeuIlleProMetThrTyrLysSerLysSerGluTyrPheIleProLysGln 95

OY 181 GAGACCTACAAAATGCTGATGTCGTCGAGTCTAATCCCTCAGGNATGATGAA 240
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 96 GluSerTyrAspGlnAlaAspValIleValAlaAsnProTyrLeuLysTyrGlyAspAsp 115

OY 241 CCTACACTGNCAGATGGGCAACTGTGGCGAG 273
   |||||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
DB 116 ProTyrThrLeuGlnTyrGlyArgCysGlyGln 126

```

```
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-193-562D-34

Alignment Scores:
Pred. No.: 3e-32      Length: 902
Score: 287.00        Matches: 52
Percent Similarity: 75.82%  Conservaive: 17
Best Local Similarity: 57.14%  Mismatches: 22
Query Match: 60.93%      Indels: 0
DB: 4                Gaps: 0

US-09-049-696-2 (1-273) x US-09-193-562D-34 (1-902)

QY 1 GTTGCAATGACCCCAATGTCAGAAAGATGAAACACTCTCTTCAACAATAAAGACATG 60
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 36 lIeAlIleIsnProSeRvAlProGIuAspGIuIAspIleuIleProSeRrIleYsGIuMet 55
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 61 GTGACCCAGGCACTCTGTATCTGTTGAAGTACAGAGAAAGGATTTTATTCAAAAT 120
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
56 ValThrGIuAlaSeRThrIyRleuPheGIuAlaSeRcInclIyAlaIyRlyPheArGIAsn 75
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
121 GTTGCCATTGATTCCTGAAACATGGAACAAGATGACTATGTGAGACCAAACTT 180
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
76 lIeSeRrIleuValProMetThrIyRlySeRrIyRleuMetProLYsArg 95
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 181 GAGACCTACAAAATGCTGATGTTGCTGCTGAGTCTANTCCTCCAGGNAATGAA 240
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 96 GluSeRrIyRAspIyAlaAspValIleValAlaAspProHIsleuGIuIAspAsp 115
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 241 CCTACACTGNGCAGATGGGCAACTGTGGCAG 273
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 116 ProTYrThrleuGIuIyRGIuIyGInCysGIyAsp 126
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

RESULT 8
US-09-193-562D-30
; Sequence 30, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 30
LENGTH: 1000
TYPE: PRT
ORGANISM: Homo sapiens
US-09-193-562D-30

Alignment Scores:
Pred. No.: 1.6e-31      Length: 1000
Score: 282.00          Matches: 54
Percent Similarity: 76.92%  Conservaive: 16
Best Local Similarity: 59.34%  Mismatches: 21
Query Match: 59.87%      Indels: 0
DB: 4                Gaps: 0

US-09-049-696-2 (1-273) x US-09-193-562D-30 (1-1000)

QY 1 GTTGCAATGACCCCAATGTCAGAAAGATGAAACACTCTCTTCAACAATAAAGACATG 60
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 36 lIeAlIleIsnProSeRvAlProGIuAspGIuIAspIleuIleProSeRrIleYsGIuMet 55
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 61 GTGACCCAGGCACTCTGTATCTGTTGAAGTACAGAGAAAGGATTTTATTCAAAAT 120
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
56 ValThrGIuAlaSeRThrIyRleuPheGIuAlaSeRcInclIyAlaIyRlyPheArGIAsn 75
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 121 GTTGCCATTGATTCCTGAAACATGGAACAAGATGACTATGTGAGACCAAACTT 180
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
```

```
|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 76 ValSeRrIleuIleProMetThrIyRlySeRrIyRleuIleProLYsGIu 95
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 181 GAGACCTACAAAATGCTGATGTTGCTGCTGAGTCTANTCCTCCAGGNAATGAA 240
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 96 GluThrIyRAspIuAlaAspValIleValAlaAspIleuIyRlyAspAsp 115
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 241 CCTACACTGNGCAGATGGGCAACTGTGGCAG 273
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 116 ProTYrThrleuGIuIyRGIuIyGInCysGIyAsp 126
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

RESULT 9
US-09-193-562D-32
; Sequence 32, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 32
LENGTH: 943
TYPE: PRT
ORGANISM: Homo sapiens
US-09-193-562D-32

Alignment Scores:
Pred. No.: 3.2e-23      Length: 943
Score: 223.50          Matches: 42
Percent Similarity: 68.13%  Conservaive: 20
Best Local Similarity: 46.15%  Mismatches: 28
Query Match: 47.45%      Indels: 1
DB: 4                Gaps: 1

US-09-049-696-2 (1-273) x US-09-193-562D-32 (1-943)

QY 1 GTTGCAATGACCCCAATGTCAGAAAGATGAAACACTCTCTTCAACAATAAAGACATG 60
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 45 lIeAlIleIsnProGIuAlaProGIuAspGIuIAspIleuIleSeRsnIleYsGIuMet 64
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 61 GTGACCCAGGCACTCTGTATCTGTTGAAGTACAGAGAAAGGATTTTATTCAAAAT 120
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 65 lIeThrGIuAlaSeRThrIyRleuPheAsnAlaThrIyRlyArgValIlePheArGIAsn 84
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 121 GTTGCCATTGATTCCTGAAACATGGAACAAGATGACTATGTGAGACCAAACTT 180
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 85 lIeYsIleuIleProAlaThrIyRlyAlaAsnAsn---SeRlySleYsGIu 103
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 181 GAGACCTACAAAATGCTGATGTTGCTGCTGAGTCTANTCCTCCAGGNAATGAA 240
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 104 GluSeRrIyGIuIyAlaAsnValIleValThrAspTrIyGIuAlaIyHIsGIyAspAsp 123
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
QY 241 CCTACACTGNGCAGATGGGCAACTGTGGCAG 273
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 124 ProTYrThrleuGIuIyRGIuIyGInCysGIyAsp 134
   :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

RESULT 10
US-09-129-030-42
; Sequence 42, Application US/09129030A
; Patent No. 6242221
; GENERAL INFORMATION:
; APPLICANT: COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION
; TITLE OF INVENTION: GENOMIC PRO CLONES
; FILE REFERENCE: 57072-PCT-US
; CURRENT APPLICATION NUMBER: US/09/129,030A
; PRIOR FILING DATE: 1998-08-04
; EARLIER APPLICATION NUMBER: AU PNT7856
; PRIOR FILING DATE: 1996-02-05
```



```

      EARLIER APPLICATION NUMBER: AU PO2361
      EARLIER FILING DATE: 1996-09-16
      EARLIER APPLICATION NUMBER: PCT/AU97/00041
      EARLIER FILING DATE: 1997-01-24
      NUMBER OF SEQ ID NOS: 66
      SOFTWARE: PatentIn Ver. 2.0
      SEQ ID NO 42
      LENGTH: 81
      TYPE: PRT
      ORGANISM: RICE
      US-09-129-030-42

Alignment Scores:
Pred. No.:          0.482          Length:          81
Score:              65.00          Matches:         13
Percent Similarity: 59.38%         Conservative:   6
Best Local Similarity: 40.62%      Mismatches:    13
Query Match:        13.80%         Indels:         0
      B:              4            Gaps:              0

US-09-049-696-2 (1-273) x US-09-129-030-42 (1-81)
Oy      10 GACCCAAATGTCGACGAGATGATAAACAACATTCATCAACAATAAAGACATGTGACCCAG      69
      ||||| ::::::::::::::: :: :: ||| ::::|| |||
Db      49 AsprOthriIleProGluAspGlnLeuIleAspGlnsInLeuYsIleMeTTrYArgGln      68
Oy      70 GCATCTCTGTATCTGTTTGAAGCTACAGAAAGCCA      105
      ||||| ::::: |||
Db      69 AlaSerAsnHisIleHisSerLeuThrGlnThrArg      80

RESULT 11
US-09-446-504-5
; Sequence 5, Application US/09446504
; Patent No. 6218150
; GENERAL INFORMATION:
; APPLICANT: UEMORI, Takashi
; APPLICANT: SATO, Yoshimi
; APPLICANT: FUJITA, Tomoko
; APPLICANT: MIYAKE, Kazuo
; APPLICANT: MUKAI, Hiroyuki
; APPLICANT: ASADA, Kiyozo
; APPLICANT: KATO, Ikunoshin
; TITLE OF INVENTION: DNA POLYMERASE-RELATED FACTORS
; FILE REFERENCE: 1422-408PCT
; CURRENT APPLICATION NUMBER: US/09/446,504
; CURRENT FILING DATE: 1999-12-23
; PRIOR APPLICATION NUMBER: PCT/JP98/02845
; PRIOR FILING DATE: 1998-06-24
; PRIOR APPLICATION NUMBER: JP 9-187496
; PRIOR FILING DATE: 1997-06-26
; PRIOR APPLICATION NUMBER: JP 9-320692
; PRIOR FILING DATE: 1997-11-27
; NUMBER OF SEQ ID NOS: 92
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 613
; TYPE: PRT
; ORGANISM: Pyrococcus furiosus
US-09-446-504-5

Alignment Scores:
Pred. No.:          1.1           Length:          613
Score:              64.50          Matches:         13
Percent Similarity: 58.18%         Conservative:   19
Best Local Similarity: 23.64%      Mismatches:    18
Query Match:        13.69%         Indels:         5
      B:              4            Gaps:              2

US-09-049-696-2 (1-273) x US-09-446-504-5 (1-613)
Oy      1 GTTGCAATCGACCCCAATGTGCCAGAGATGATAAACAACACTCATTCACAACAATAAAGACATG      60
      ||||| ||| ::::: ||||| ||| ::::: ||| ::::: |||
Db      531 ValProIleAlaProAsp--ProGluAspLeuValIleGluGluValProAspVal      549

```

```

OY      61 GTGACCCAGGACATCTGATCTGTTGAGACCTCAGAGAAAGCATTTTCAAAAT 120
           |||  ::::::::::::::: |||  :::::
DB      550 VALHISMETGLYHISVALHISVALTYRAspIaVal-----ValTYrArgGly 555
OY      121 GTTGCCATTTTGATTCCTGGAACATGAGACAAAGNTGACTAT 165
           |||  ::::: |||::: :: :::::
DB      566 ValGlnIeuValAsnSerAlaThrTrpGlnAlaGlnIthrGluPhe 580

RESULT 12
US-09-712-266-5
/ Sequence 5, Application US/09712266
/ Patent No. 6333158
/ GENERAL INFORMATION:
/ APPLICANT: UEMORI, Takashi
/ APPLICANT: SATO, Yoshimi
/ APPLICANT: FUJITA, Tomoko
/ APPLICANT: MIYAKE, Kazuo
/ APPLICANT: MUKAI, Hiroyuki
/ APPLICANT: ASADA, Hiroyo
/ APPLICANT: KATO, Ikunoshin
/ TITLE OF INVENTION: DNA POLYMERASE-RELATED FACTORS
/ FILE REFERENCE: 1422-408PCT
/ CURRENT APPLICATION NUMBER: US/09/712,266
/ PRIOR FILING DATE: 2000-11-15
/ PRIOR APPLICATION NUMBER: US 09/446,504
/ PRIOR FILING DATE: 1999-12-23
/ PRIOR APPLICATION NUMBER: PCT/JP98/02845
/ PRIOR FILING DATE: 1998-06-24
/ PRIOR APPLICATION NUMBER: JP 9-187496
/ PRIOR FILING DATE: 1997-06-26
/ PRIOR APPLICATION NUMBER: JP 9-320692
/ PRIOR FILING DATE: 1997-11-27
/ NUMBER OF SEQ ID NOS: 92
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 5
/ LENGTH: 613
/ TYPE: PRT
/ ORGANISM: Pyrococcus furiosus
US-09-712-266-5

Alignment Scores:
Pred. NO.:
Score:
Percent Similarity: 1.1 Length: 613
Best Local Similarity: 58.18% Matches: 13
Query Match: 23.64% Conservative: 19
13.69% Mismatches: 18
Gaps: 5
Indels: 5
Gaps: 2

US-09-049-696-2 (1-273) x US-09-712-266-5 (1-613)
OY      1 GTTGCAATCGACCCCATGTGCCGAGAGATGAAACACTCATTCACAACAATAAGACATG 60
           |||  |||  |||::: |||::: |||::: |||:::
DB      531 ValProIleAlaProAsp--ProGlnAspIeuValIleGluGlnValProAspVal 549
OY      61 GTGACCCAGGACATCTGATCTGTTGAGACCTCAGAGAAAGCATTTTCAAAAT 120
           |||  ::::::::::::::: |||  :::::
DB      550 VALHISMETGLYHISVALHISVALTYRAspIaVal-----ValTYrArgGly 555
OY      121 GTTGCCATTTTGATTCCTGGAACATGAGACAAAGNTGACTAT 165
           |||  ::::: |||::: :: :::::
DB      566 ValGlnIeuValAsnSerAlaThrTrpGlnAlaGlnIthrGluPhe 580

RESULT 13
US-08-050-319b-52
/ Sequence 52, Application US/08050319B
/ Patent No. 5633145
/ GENERAL INFORMATION:
/ APPLICANT: M.J.C. Feldmann, P.W. Gray,
/ APPLICANT: M.J.C. Turner, F.M. Brennan
/ TITLE OF INVENTION: Modified human TNFalpha (Tumor
/ TITLE OF INVENTION: Necrosis Factor alpha) Receptor
/ NUMBER OF SEQUENCES: 57

```



```

? APPLICATION NUMBER: US 07/872,129
?
? FILING DATE: 22-APR-1992
?
? CLASSIFICATION: 435
?
? ATTORNEY/AGENT INFORMATION:
? NAME: James W. Hellwege
? REGISTRATION NUMBER: 28, 808
?
? REFERENCE FOR SEQ ID NO: 4:
? INFORMATION FOR SEQ ID NO: 4:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 153 amino acids
? TYPE: amino acid
?
? TOPOLOGY: linear
?
? MOLECULE TYPE: protein
?
? US-08-219-237B-4

```

Alignment scores:	
Pred. No.:	1.58
Score:	62.00
Percent Similarity:	40.00%
Best Local Similarity:	31.67%
Indels Match:	12.60%
DB:	2
Length:	153
Matches:	19
Conservative:	5
Mismatches:	24
Indels:	12
Gaps:	3

US-09-049-696-2 (1-273) x US-08-219-237B-4 (1-153)

Oy	177	TTTTGGTTCACATGACGATC	TTTGCTTCACGATTCAGGAATCAAAATGGCAACAT	118
Db	93	TYTTPSERGIUASLENPHEGLI	CYSPhaenSyrSerLeuCYSLeuASnGLYThrVal	112
Oy	117	TTTGAAATAAATAGCTTTCCTCGTAGCTTCAACACAGATACAGAGATGCGGGTCACCAT	58	
Db	113	-----HLSLeuSerCYSGInGLuLYSLInSnThrValCYSThrCYSHISAla	128	
Oy	57	GTCCCTTATTTTGTG--	AATGACGTCTTCATCTTCGCACATGGGCGCATATGCAAC	1
Db	129	GLYPHETHELUARGGInASnGLuCYs-----	ValSerCYSSer	141

Search completed: October 17, 2002, 17:59:09  
Job time : 9.66809 secs

**This Page Blank (usp10)**

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: October 17, 2002, 09:10:09 ; Search time 9.83693 Seconds  
(without alignments)  
6816.956 Million cell updates/sec

Title: US-09-049-696-2

Perfect score: 273

Sequence: 1 GTTGCATCGACCCCAATGT.....AGATGGCACTGTGGCAG 273

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 10%  
Listing first 45 summaries

Database :

Issued\_Patents\_NA.\*  
1: /cgn2\_6/ptodata/2/1na/5A.COMB.seq:\*  
2: /cgn2\_6/ptodata/2/1na/5B.COMB.seq:\*  
3: /cgn2\_6/ptodata/2/1na/6A.COMB.seq:\*  
4: /cgn2\_6/ptodata/2/1na/6B.COMB.seq:\*  
5: /cgn2\_6/ptodata/2/1na/PTOUS.COMB.seq:\*  
6: /cgn2\_6/ptodata/2/1na/Dacfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	267.4	97.9	3007	4	US-09-193-562D-27	Sequence 27, App
2	245.4	89.9	401	4	US-09-221-298-34	Sequence 34, App
3	124.6	45.6	3317	4	US-09-193-562D-1	Sequence 1, App
4	119.8	43.9	3418	4	US-09-193-562D-29	Sequence 29, App
5	113.4	41.5	3022	4	US-09-193-562D-33	Sequence 33, App
6	75.2	27.5	2970	4	US-09-193-562D-31	Sequence 31, App
7	31.6	11.6	2615	1	US-08-072-281-1	Sequence 1, App
8	31.6	11.6	2615	1	US-08-759-446-1	Sequence 1, App
9	31.6	11.6	2615	1	US-09-027-998A-1	Sequence 1, App
10	31.6	11.6	3050	2	US-09-031-442A-21	Sequence 21, App
11	31.6	11.6	3050	4	US-09-258-377-21	Sequence 21, App
12	31	11.4	1888	1	US-08-229-145-13	Sequence 11, App
13	30.4	11.1	3663	4	US-09-499-884-11	Sequence 11, App
14	29.6	10.8	4266	4	US-09-651-011A-3	Sequence 3, App
15	29.6	10.8	5194	2	US-08-642-846-1	Sequence 1, App
16	29.6	10.8	5194	4	US-09-264-604-1	Sequence 1, App
17	29.4	10.8	5401	4	US-09-269-040-1	Sequence 1, App
18	29.2	10.7	6030	1	US-08-441-139-8	Sequence 8, App
19	29	10.6	1338	1	US-08-485-216-1	Sequence 1, App
20	29	10.6	1338	2	US-09-003-245-1	Sequence 1, App
21	29	10.6	1338	2	US-08-853-552-1	Sequence 1, App
22	29	10.6	2656	2	US-08-685-625A-5	Sequence 5, App
23	28.4	10.4	1230	4	US-09-232-479-22	Sequence 22, App
24	28.4	10.4	1869	4	US-09-350-268-1	Sequence 1, App
25	28.4	10.4	3393	4	US-09-104-324B-1	Sequence 1, App
26	28.4	10.4	3393	4	US-09-162-713-1	Sequence 1, App
27	28.4	10.4	3461	4	US-09-242-948-1	Sequence 1, App

C	28	28.2	10.3	628	4	US-09-385-982-190	Sequence 190, App
C	29	28	10.3	3224	3	US-09-079-415-3	Sequence 3, Appl
C	30	27.8	10.2	1760	1	US-08-413-118-117	Sequence 117, App
C	31	27.8	10.2	1760	3	US-08-473-446-117	Sequence 117, App
C	32	27.8	10.2	2280	1	US-08-220-151-11	Sequence 11, Appl
C	33	27.8	10.2	2280	1	US-08-413-118-11	Sequence 11, Appl
C	34	27.8	10.2	2280	1	US-08-473-446-11	Sequence 11, Appl
C	35	27.8	10.2	3918	4	US-08-936-165A-243	Sequence 243, App
C	36	27.8	10.2	6216	3	US-09-213-053-1	Sequence 1, Appl
C	37	27.8	10.2	51952	3	US-08-947-823-1	Sequence 1, Appl
C	38	27.6	10.1	3987	3	US-07-688-352C-19	Sequence 19, Appl
C	39	27.6	10.1	3987	2	US-08-474-379C-19	Sequence 19, Appl
C	40	27.6	10.1	3987	3	US-09-146-249A-19	Sequence 19, Appl
C	41	27.6	10.1	3987	3	US-08-206-188B-19	Sequence 19, Appl
C	42	27.6	10.1	3987	5	PCT-US91-02714-19	Sequence 19, Appl
C	43	27.4	10.0	320	4	US-09-030-607-224	Sequence 224, App
C	44	27.4	10.0	320	4	US-09-439-313-224	Sequence 224, App
C	45	27.4	10.0	1051	3	US-08-961-083-125	Sequence 125, App

#### ALIGNMENTS

```
RESULT 1
US-09-193-562D-27
; Sequence 27, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedict U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193.562D
; PRIOR APPLICATION NUMBER: US/60/065.922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 27
; LENGTH: 3007.
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-193-562D-27

Query Match          97.9% Score 267.4; DB 4; Length 3007;
Best Local Similarity 98.2%; Pred. No. 4.2e-73;
Matches 268; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 GTTGCATCGACCCCAATGTGCGCAGAGATGAAACACTTCATCAACAATAAGGACATG 60
   |||||
DB 155 GTTGCATCGACCCCAATGTGCGCAGAGATGAAACACTTCATCAACAATAAGGACATG 214
   |||||

QY 61 GTGACCCAGGACATCTGTATCTGTTGAGCTACAGAAAGCATTTTATTTCAAAT 120
   |||||
DB 215 GTGACCCAGGACATCTGTATCTGTTGAGCTACAGAAAGCATTTTATTTCAAAT 274
   |||||

QY 121 GTTGCATTTGATTCCTGAACATGAAAGCAAGGATGATAGTACCAAACTT 180
   |||||
DB 275 GTTGCATTTGATTCCTGAACATGAAAGCAAGGATGATAGTACCAAACTT 334
   |||||

QY 181 GAGACCTACAAAATGCTGATGTTGTTGCTGAGTCTANTCTCCAGNAATGATGAA 240
   |||||
DB 335 GAGACCTACAAAATGCTGATGTTGTTGCTGAGTCTANTCTCCAGNAATGATGAA 394
   |||||

QY 241 CCTTACACTGACGACATGGGCAACTGTGGCAG 273
   |||||
DB 395 CCTTACACTGACGACATGGGCAACTGTGGCAG 427
   |||||

RESULT 2
US-09-221-298-34
; Sequence 34, Application US/09221298
; Patent No. 6284241
; GENERAL INFORMATION:
```

APPLICANT: Xu, Jiangchun  
 TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY AND DIAGNOSIS  
 TITLE OF INVENTION: OF COLON CANCER  
 FILE REFERENCE: 210121.471  
 CURRENT APPLICATION NUMBER: US/09/221,298  
 CURRENT FILING DATE: 1998-12-23  
 NUMBER OF SEQ ID NOS: 112  
 SOFTWARE: FastSeq for Windows Version 3.0  
 SEQ ID NO 34  
 LENGTH: 401  
 TYPE: DNA  
 ORGANISM: Human  
 US-09-221-298-34

Query Match 89.9%; Score 245.4; DB 4; Length 401;  
 Best Local Similarity 97.5%; Pred. No. 1,2e-66;  
 Matches 268; Conservative 0; Mismatches 5; Indels 2; Gaps 2;

QY 1 GTTGCATTCGACCCCAATGTCGAGAAAGTGAACACATCTCAACAATTAAGACATG 60  
 25 GTTGCATTCGACCCCAATGTCGAGAAAGTGAACACATCTCAACAATTAAGACATG 84  
 Db 61 GTGACCCAGGCACTCTGTATCTGTTGAAGCTACAGGAAAGCGATTTTCAAAAT 120  
 85 GTGACCCAGGCACTCTGTATCTGTTGAAGCTACAGGAAAGCGATTTTCAAAAT 144  
 QY 121 GTTGCATTTGATTCCTGAAACATGGAAGCAAGTGTGATGTGAGCCAAACTT 180  
 Db 145 GTTGCATTTGATTCCTGAAACATGGAAGCAAGTGTGATGTGAGCCAAACTT 204  
 QY 181 GAGACCTACAAAATGCTGATGTTCTGTTGC-TGAGTCTANTCCTCCAGGAAATGATGA 239  
 Db 205 GAGACCTACAAAATGCTGATGTTCTGTTGC-TGAGTCTANTCCTCCAGGAAATGATGA 264  
 QY 240 ACCCTACACTGNGAGAT-GGGCAACTGTGGCGAG 273  
 Db 265 ACCCTACACTGAGAGATGGGCAACTGTGGAGAG 299

## RESULT 3

US-09-193-562D-1  
 Sequence 1, Application US/09193562D  
 Patent No. 6309857  
 GENERAL INFORMATION:  
 APPLICANT: Pauli, Benedicht U.  
 TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 FILE REFERENCE: 18617.0052  
 CURRENT APPLICATION NUMBER: US/09/193,562D  
 CURRENT FILING DATE: 1998-11-17  
 PRIOR APPLICATION NUMBER: US/60/065,922  
 PRIOR FILING DATE: 1997-11-17  
 NUMBER OF SEQ ID NOS: 47  
 SEQ ID NO 1  
 LENGTH: 3317  
 TYPE: DNA  
 ORGANISM: Unknown  
 FEATURE:  
 OTHER INFORMATION: sequence encoding Lu-ECAM-1 and Lu-ECAM-1 associated  
 OTHER INFORMATION: protein from bovine endothelial cells  
 US-09-193-562D-1

Query Match 45.6%; Score 124.6; DB 4; Length 3317;  
 Best Local Similarity 65.7%; Pred. No. 4e-29;  
 Matches 178; Conservative 0; Mismatches 93; Indels 0; Gaps 0;

QY 2 TTGCAATGACCCCAATGTCGAGAAAGTGAACACATCTCAACAATTAAGACATG 61  
 Db 169 TTGCAATTAACCCAGTGTGCGAGAAATGAATACTCATTAAGAAATGAAGATG 228  
 QY 62 TGACCCAGGCACTCTGTATCTGTTGAAGCTACAGGAAAGCGATTTTCAAAATG 121  
 Db 229 TAACCTGAAGCTTCTACTTACTGTTTCATGCCACCAAGAAAGTATTTTCAAGAAATG 288

QY 122 TTGCAATTTGATTCCTGAAACATGAGACAAAGGNTGACTGTGAGCCAAACTTG 181  
 Db 289 TGAGCAATTTTAATTCGAATGACCTGGAATCAAAATCTGAGTCTTCATACCAAAACAG 348  
 QY 182 AGACCTACAAAATGCTGATGTTCTGTTGCTGAGTCTANTCCTCCAGGAAATGATGAAC 241  
 Db 349 AATCATATGACGAGGAGATGTCATAGTGTCTAATCCCTATCTAATAATATGAGATGATC 408  
 QY 242 CCTACACTGNGCAGATGGGCAACTGTGGCGA 272  
 Db 409 CCTATACACTTCAATATGGAAGGTGGAGA 439

## RESULT 4

US-09-193-562D-29  
 Sequence 29, Application US/09193562D  
 Patent No. 6309857  
 GENERAL INFORMATION:  
 APPLICANT: Pauli, Benedicht U.  
 TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 FILE REFERENCE: 18617.0052  
 CURRENT APPLICATION NUMBER: US/09/193,562D  
 CURRENT FILING DATE: 1998-11-17  
 PRIOR APPLICATION NUMBER: US/60/065,922  
 PRIOR FILING DATE: 1997-11-17  
 NUMBER OF SEQ ID NOS: 47  
 SEQ ID NO 29  
 LENGTH: 3418  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 US-09-193-562D-29

Query Match 43.9%; Score 119.8; DB 4; Length 3418;  
 Best Local Similarity 64.6%; Pred. No. 1,2e-27;  
 Matches 175; Conservative 0; Mismatches 96; Indels 0; Gaps 0;

QY 2 TTGCAATGACCCCAATGTCGAGAAAGTGAACACATCTCAACAATTAAGACATG 61  
 Db 125 TTGCAATTAATCCAGTGTGCGAGAAATGAATACTCATTAAGAAATGAAGATG 184  
 QY 62 TGACCCAGGCACTCTGTATCTGTTGAAGCTACAGGAAAGCGATTTTCAAAATG 121  
 Db 185 TAACCTGAAGCTTCTACTTACTGTTTCATGCCACCAAGAAAGTATTTTCAAGAAATG 244  
 QY 122 TTGCAATTTGATTCCTGAAACATGAGACAAAGGNTGACTGTGAGCCAAACTTG 181  
 Db 245 TAACCAATTTTAATTCGAATGACCTGGAATCAAAATCTGAGTCTTCATACCAAAACAG 304  
 QY 182 AGACCTACAAAATGCTGATGTTCTGTTGCTGAGTCTANTCCTCCAGGAAATGATGAAC 241  
 Db 305 AATCATATGACGAGGAGATGTCATAGTGTCTAATCCCTATCTAATAATATGAGATGATC 364  
 QY 242 CCTACACTGNGCAGATGGGCAACTGTGGCGA 272  
 Db 365 CCTATACACTTCAATATGGAAGGTGGAGA 395

## RESULT 5

US-09-193-562D-33  
 Sequence 33, Application US/09193562D  
 Patent No. 6309857  
 GENERAL INFORMATION:  
 APPLICANT: Pauli, Benedicht U.  
 TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
 TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
 FILE REFERENCE: 18617.0052  
 CURRENT APPLICATION NUMBER: US/09/193,562D  
 CURRENT FILING DATE: 1998-11-17  
 PRIOR APPLICATION NUMBER: US/60/065,922  
 PRIOR FILING DATE: 1997-11-17  
 NUMBER OF SEQ ID NOS: 47

SEQ ID NO 33  
LENGTH: 3022  
TYPE: DNA  
ORGANISM: Mus musculus  
US-09-193-562D-33

Query Match 41.5%; Score 113.4; DB 4; Length 3022;  
Best Local Similarity 63.1%; Pred. No. 1.1e-25;  
Matches 171; Conservative 0; Mismatches 100; Indels 0; Gaps 0;

QY 2 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 61  
DB 124 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 183  
QY 62 TGACCCAGCATCTCTGATCTGTTGAGCTACAGCAAGCAATTTTTCACAAATG 121  
DB 184 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 243  
QY 122 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 181  
DB 244 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 303  
QY 182 AGACCTACAAAATGCTGATGTTGCTGAGTCTANTCCTCCAGNAATGATGAAC 241  
DB 304 AATCGTACGACCAAGAGCAGCTCATGATGCGGATCTCACCCTGCAACATGAGAGCACC 363  
QY 242 CCTACCTGNGCAGATGGCACTGTGGCGA 272  
DB 364 CCTACCTGNGCAGATGGCACTGTGGCGA 394

RESULT 6  
US-09-193-562D-31  
Sequence 31, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedict U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193,562D  
CURRENT FILING DATE: 1998-11-17  
PRIOR APPLICATION NUMBER: US/60/065,922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 31  
LENGTH: 2970  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-31

Query Match 27.5%; Score 75.2; DB 4; Length 2970;  
Best Local Similarity 57.1%; Pred. No. 6.2e-14;  
Matches 153; Conservative 0; Mismatches 112; Indels 3; Gaps 1;

QY 2 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 61  
DB 242 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 301  
QY 62 TGACCCAGCATCTCTGATCTGTTGAGCTACAGCAAGCAATTTTTCACAAATG 121  
DB 302 TGACCCAGCATCTCTGATCTGTTGAGCTACAGCAAGCAATTTTTCACAAATG 361  
QY 122 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 181  
DB 362 TTGCAATGCAGCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 418  
QY 182 AGACCTACAAAATGCTGATGTTGCTGAGTCTANTCCTCCAGNAATGATGAAC 241  
DB 419 AATCGTACGACCAAGAGCAGCTCATGATGCGGATCTCACCCTGCAACATGAGAGCACC 478  
QY 242 CCTACCTGNGCAGATGGCACTGTGGCGA 269

DB 479 CATACACCTACATACAGAGGCTGTGG 506

RESULT 7  
US-08-072-281-1  
Sequence 1, Application US/08072281  
Patent No. 5495071  
GENERAL INFORMATION:

APPLICANT: Fischhoff, David A.  
APPLICANT: Fuchs, Roy L.  
APPLICANT: Lavrik, Paul B.  
APPLICANT: McPherson, Sylvia A.  
APPLICANT: Perlak, Frederick J.  
TITLE OF INVENTION: Insect Resistant Plants  
NUMBER OF SEQUENCES: 2  
CORRESPONDENCE ADDRESS:  
STREET: 700 Chesterfield Parkway No. 5495071th  
CITY: St. Louis  
STATE: Missouri  
COUNTRY: United States of America  
ZIP: 63198

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/072,281  
FILING DATE: 19930604  
CLASSIFICATION: 800  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/533284  
FILING DATE: 14-MAY-1990  
ATTORNEY/AGENT INFORMATION:  
NAME: Lavin Jr., Lawrence M.  
REGISTRATION NUMBER: 30,768  
REFERENCE/DOCKET NUMBER: 38-21(10629)A  
TELEPHONE: (314) 537-7286  
TELEFAX: (314) 537-6047  
INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:  
LENGTH: 2615 base pairs  
TYPE: NUCLEIC ACID  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
FEATURE:

NAME/KEY: CDS  
LOCATION: 205..2139  
US-08-072-281-1

Query Match 11.6%; Score 31.6; DB 1; Length 2615;  
Best Local Similarity 51.4%; Pred. No. 1.5;  
Matches 73; Conservative 0; Mismatches 69; Indels 0; Gaps 0;

QY 1 GTTGAATGACCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 60  
DB 2163 GTTGAATGACCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 2222  
QY 61 GTGACCCAGCATCTCTGATCTGTTGAGCTACAGCAAGCAATTTTTCACAAATG 120  
DB 2223 GTTGAATGACCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 2282  
QY 121 GTTGAATGACCCCAATGTCGCAAGAAAGTAACTCATTCACAAATTAAGAGCATGG 142  
DB 2283 GAAGGAAGTTTAATATGTAA 2304

RESULT 8  
US-08-759-446-1  
Sequence 1, Application US/08759446

```
Patent No. 5763241
GENERAL INFORMATION:
APPLICANT: Fischhoff, David A.
APPLICANT: Fuchs, Roy L.
APPLICANT: Lavin, Paul B.
APPLICANT: McPherson, Sylvia A.
APPLICANT: Perlak, Frederick J.
TITLE OF INVENTION: Insect Resistant Plants
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lawrence M. Lavin, Jr., Monsanto Co., B44F
STREET: 700 Chesterfield Parkway No. 5763241th
CITY: St. Louis
STATE: Missouri
COUNTRY: United States of America
ZIP: 63198
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/759,446
FILING DATE: 05-DEC-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/072,281
FILING DATE:
APPLICATION NUMBER: US 07/523284
FILING DATE: 14-MAY-1990
ATTORNEY/AGENT INFORMATION:
NAME: Lavin Jr., Lawrence M.
REGISTRATION NUMBER: 30,768
REFERENCE/DOCKET NUMBER: 38-21(10629)A
TELECOMMUNICATION INFORMATION:
TELEPHONE: (314) 537-7286
TELEFAX: (314) 537-6047
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2615 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
MOLECULE TYPE: linear
FEATURE:
NAME/KEY: CDS
LOCATION: 205..2139
US-08-759-446-1

Query Match 11.6%; Score 31.6; DB 1; Length 2615;
Best Local Similarity 51.4%; Pred. No. 1.5;
Matches 73; Conservative 0; Mismatches 69; Indels 0; Gaps 0;

QY 1 GTTGCAATCGACCCCAATGTGCCAGAGATGAACACATCATTCACAAATTAAGGACATG 60
DB 2163 GTGACCATCTATGATAGTAAACAAAGATTAAGTCAATTAATAATTAACATA 2222
QY 61 GTGACCCAGGACATCTGTATCTGTGTTGAAGCTACAGGAAGCGATTATTTCAAAAT 120
DB 2223 GTGTTCTTCAACTTTCGCTTTTGAAGGTAGATGAAGAACATATTTTCAAAAT 2282
QY 121 GTTGCAATTTGATCCTGAAA 142
DB 2283 GAAGGAGTTTAAATATGTAA 2304

RESULT 9
US-09-027-998A-1
Sequence 1, Application US/09027998A
Patent No. 6284949
GENERAL INFORMATION:
APPLICANT: Fischhoff, David A
APPLICANT: Fuchs, Roy L
```

```
APPLICANT: Perlak, Frederick J
TITLE OF INVENTION: Insect Resistant Plants
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold White and Durkee
STREET: PO Box 4433
CITY: Houston
STATE: TX
COUNTRY: USA
ZIP: 77210-4433
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/027,998A
FILING DATE: 23-FEB-1998
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Patterson, Melinda L
REGISTRATION NUMBER: 33,062
REFERENCE/DOCKET NUMBER: MOBT:195
TELECOMMUNICATION INFORMATION:
TELEPHONE: (713) 787-1400
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2615 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
MOLECULE TYPE: linear
US-09-027-998A-1
```

Query Match 11.6%; Score 31.6; DB 4; Length 2615;  
Best Local Similarity 51.4%; Pred. No. 1.5;

Matches 73; Conservative 0; Mismatches 69; Indels 0; Gaps 0;

```
QY 1 GTTGCAATCGACCCCAATGTGCCAGAGATGAACACATCATTCACAAATTAAGGACATG 60
DB 2163 GTGACCATCTATGATAGTAAACAAAGATTAAGTCAATTAATAATTAACATA 2222
QY 61 GTGACCCAGGACATCTGTATCTGTGTTGAAGCTACAGGAAGCGATTATTTCAAAAT 120
DB 2223 GTGTTCTTCAACTTTCGCTTTTGAAGGTAGATGAAGAACATATTTTCAAAAT 2282
QY 121 GTTGCAATTTGATCCTGAAA 142
DB 2283 GAAGGAGTTTAAATATGTAA 2304
```

```
RESULT 10
US-09-031-442A-21
Sequence 21, Application US/09031442A
Patent No. 5955310
GENERAL INFORMATION:
APPLICANT: Widner, William
APPLICANT: Thomas, Michael D.
APPLICANT: Thomas, Michael D.
TITLE OF INVENTION: Methods For Producing A Polypeptide
TITLE OF INVENTION: In A Bacillus Cell
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 5955310 No. 5955310disk of No. 5955310th America, Inc.
STREET: 405 Lexington Avenue
CITY: New York
STATE: NY
COUNTRY: U.S.A.
ZIP: 10174
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
```



## CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/031.442A  
FILING DATE: 26-FEB-1998  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Lambiris, Elias J.  
REGISTRATION NUMBER: 33,728  
REFERENCE/DOCKET NUMBER: 5455.000-US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 212-867-0123  
TELEFAX: 212-878-9655  
TELEX:  
INFORMATION FOR SEQ ID NO: 21:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 3050 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
-09-031-442A-21

## Query Match

Best Local Similarity 11.6%; Score 31.6; DB 2; Length 3050;  
Matches 73; Conservative 0; Mismatches 69; Indels 0; Gaps 0;

OY 1 GTTGCAATGACCCCAATGTCGCGAGATGAACACTCATTCACAAATAAGACATG 60  
DB 2594 GTGACCATCTATGATAGTAAGCAAGATATAAATGATTAATAATGATACATA 2653  
OY 61 GTGACCCAGGACATCTCTATCTGTTGTAAGCTACAGAAACGATTTTATTTCAAAAT 120  
DB 2654 GTGTTCTTCAACTTTCGCTTTTGAAGGTAGATGAAGAACACTATTTTATTTCAAAAT 2713  
OY 121 GTTGCAATTTGATTCCTGAAA 142  
DB 2714 GAAGGAAGTTTAAATATGTA 2735

## RESULT 11

US-09-258-377-21

Sequence 21, Application US/09258377  
Patent No. 6253076  
GENERAL INFORMATION:  
APPLICANT: Widner, William  
APPLICANT: Sloma, Alan  
APPLICANT: Thomas, Michael D.  
TITLE OF INVENTION: Methods For Producing A polypeptide In a  
FILE OF INVENTION: Bacillus Cell  
FILE REFERENCE: 5455.200-US  
CURRENT APPLICATION NUMBER: US/09/258.377  
EARLIER FILING DATE: 1999-02-26  
EARLIER APPLICATION NUMBER: 09/031.442  
NUMBER OF SEQ ID NOS: 33  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 21  
LENGTH: 3050  
TYPE: DNA  
ORGANISM: a: Bacillus  
US-09-258-377-21

## Query Match

Best Local Similarity 11.6%; Score 31.6; DB 4; Length 3050;  
Matches 73; Conservative 0; Mismatches 69; Indels 0; Gaps 0;

OY 1 GTTGCAATGACCCCAATGTCGCGAGATGAACACTCATTCACAAATAAGACATG 60  
DB 2594 GTGACCATCTATGATAGTAAGCAAGATATAAATGATTAATAATGATACATA 2653  
OY 61 GTGACCCAGGACATCTCTATCTGTTGTAAGCTACAGAAACGATTTTATTTCAAAAT 120  
DB 2654 GTGTTCTTCAACTTTCGCTTTTGAAGGTAGATGAAGAACACTATTTTATTTCAAAAT 2713  
OY 121 GTTGCAATTTGATTCCTGAAA 142

DB 2714 GAAGGAAGTTTAAATATGTA 2735

## RESULT 12

US-08-229-145-13

Sequence 13, Application US/08229145  
Patent No. 5691461  
GENERAL INFORMATION:  
APPLICANT: Hoke, Glenn D.  
APPLICANT: Becker, David J.  
TITLE OF INVENTION: INHIBITION OF CANDIDA USING  
TITLE OF INVENTION: OLIGONUCLEOTIDES  
NUMBER OF SEQUENCES: 26  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Woodcock, Washburn, Kurtz, Mackiewicz &  
ADDRESSEE: No. 5691461ris  
STREET: One Liberty Place, 46th floor  
CITY: Philadelphia  
STATE: PA  
COUNTRY: USA  
ZIP: 19103  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/229.145  
FILING DATE: Herewith  
CLASSIFICATION: 514  
ATTORNEY/AGENT INFORMATION:  
NAME: Leaty Ph.D., Kathryn  
REGISTRATION NUMBER: 36,317  
REFERENCE/DOCKET NUMBER: ISIS-1421  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (215) 568-3100  
TELEFAX: (215) 568-3439  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1888 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
HYPOTHETICAL: NO  
ANTI-SENSE: YES  
US-08-229-145-13

## Query Match

Best Local Similarity 11.4%; Score 31; DB 1; Length 1888;  
Matches 64; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

OY 91 GCTACAGGAAGCAATTTATTTCAAAATGTTGCAATTTGATTCCTGAACATGAAG 150  
DB 1364 GATCCAGAAATGCTGCTATTTAACTGTGCTGCTTTTCAAGAGTAAAGTATCTGTT 1423  
OY 151 ACAAGAGTACATGATGAGACCAAACTGAGACCTACAAAATGCTGATGTTGCTT 210  
DB 1424 AAGGAAGTTGAGATGAATGACCAAAATCCAAACGAAACTCATTTTGTGTGAT 1483

## RESULT 13

US-09-499-884-11

Sequence 11, Application US/09499884  
Patent No. 6265172  
GENERAL INFORMATION:  
APPLICANT: St. Clair, Daret  
APPLICANT: Urano, Muneyasu  
APPLICANT: Kasarits, Edward  
TITLE OF INVENTION: DIAGNOSTIC TEST AND THERAPY FOR MANGANESE SUPEROXIDE DISMUTASE  
TITLE OF INVENTION: ASSOCIATED DISEASES  
FILE REFERENCE: 50229-180

CURRENT APPLICATION NUMBER: US/09/499,884  
CURRENT FILING DATE: 2000-02-08  
NUMBER OF SEQ ID NOS: 12  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO: 11  
LENGTH: 3663  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-499-884-11

Query Match 11.1%; Score 30.4; DB 4; Length 3663;  
Best Local Similarity 61.2%; Pred. No. 4.1;  
Matches 49; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

QY 18 TGTGCCAGAGATGAACTCATTCACAAATTAAGGACATGTCACCGACATCTT 77  
DB 939 TGGGCAACATGAAAGAACTGTTCTACAAAAATAAAATTAAGCCAGCATGGTG 998  
QY 78 GTATCTGTGTAAGCTACAG 97  
999 GTATGCACTGTAGTTCAG 1018

## RESULT 14

US-09-651-011A-3/C  
Sequence 3, Application US/09651011A  
Patent No. 6346416  
GENERAL INFORMATION:  
APPLICANT: Nicholas M. Dean  
APPLICANT: Lex M. Cowser  
TITLE OF INVENTION: ANTISENSE MODULATION OF HPK/GCK-LIKE KINASE EXPRESSION  
FILE REFERENCE: RTS-0168  
CURRENT APPLICATION NUMBER: US/09/651,011A  
CURRENT FILING DATE: 2000-08-29  
NUMBER OF SEQ ID NOS: 49  
SEQ ID NO 3  
LENGTH: 4266  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (1)...(3528)  
US-09-651-011A-3

Query Match 10.8%; Score 29.6; DB 4; Length 4266;  
Best Local Similarity 51.5%; Pred. No. 7.7;  
Matches 68; Conservative 0; Mismatches 64; Indels 0; Gaps 0;

QY 11 ACCCCATGTGCCAGAGATGAAACACTCATTCACAAATTAAGACATGTCGACCGAG 70  
DB 368 AACACATTCCTGCCCTTGATATCCCGGATGATCAATGATGTAAGATGTGCCAGT 309  
QY 71 CATCTGTATCTGTTGAGCTACAGCAAGCAATTTTAAATTTTCCATTT 130  
DB 308 CCCCTCAGATTCCTGAGATGTAAGCATCCAGTCTTCTTGAGTGTTCCTTTG 249  
QY 131 TGATTCCTGAAA 142  
DB 248 GTGTTCTTCA 237

## RESULT 15

US-08-642-846-1  
Sequence 1, Application US/08642846  
Patent No. 5886151  
GENERAL INFORMATION:

APPLICANT: HOSTETTER, MARGARET K.  
APPLICANT: GALE, CHERYL A.  
APPLICANT: BENDEL, CATHERINE M.  
APPLICANT: TAO, NIAN-JUN  
APPLICANT: KENDRICK, KATHLEEN  
TITLE OF INVENTION: CANDIDA ALBICANS GENE, INTEGRIN-LIKE  
PROTEIN, ANTIBODIES, AND METHODS OF USE

NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MUEITING, RAASCH, GERHARDT & SCHNAPPACH, P.A.  
STREET: 119 NORTH FOURTH STREET, SUITE 203  
CITY: MINNEAPOLIS  
STATE: MINNESOTA  
COUNTRY: USA  
ZIP: 55401  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/642,846  
FILING DATE: 03-MAY-1996  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: MUEITING, ANN M.  
REGISTRATION NUMBER: 33,977  
REFERENCE/DOCKET NUMBER: 110,00280101  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 612-305-1217  
TELEFAX: 612-305-1228  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5194 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
US-08-642-846-1

Query Match 10.8%; Score 29.6; DB 2; Length 5194;  
Best Local Similarity 49.0%; Pred. No. 8.3;  
Matches 77; Conservative 0; Mismatches 80; Indels 0; Gaps 0;

QY 58 ATGTGACCCAGCATCTCTGTATCTGTTGAAGCTACAGAAAGCATTTATTTCAAA 117  
DB 3850 ATGTTCTGTCTCTTCACAGTATGATGCTACTTCAACGGTTCACAGTAAAAA 3909  
QY 118 AATGTGCCATTTTGAATCTCTGAAACATGGAAGAGGATGATGTGAGACCAAA 177  
DB 3910 GATGTTCAACACAAAGCTCTGTAAGCAAAAGCAAAAGCATATCATGATCAT 3969  
QY 178 CTGAGACTACAAAATGCTGATGTTCTGTTGCTG 214  
DB 3970 CATCATATAAACAATAAAGTATTCGCGGTG 4006

Search completed: October 17, 2002, 10:41:13  
Job time : 20.8369 secs

Result	Score	Query	Match	Length	DB	ID	Description
No.							
1	2971.8	99.6	3007	4	US-09-193-5620-27		Sequence 27, App1
2	900.2	30.2	3317	4	US-09-193-5620-1		Sequence 1, App1
3	840.6	28.2	3022	4	US-09-193-5620-33		Sequence 33, App1
4	832.6	27.9	3418	4	US-09-193-5620-29		Sequence 29, App1
5	790.8	26.5	878	1	US-08-469-667-8		Sequence 8, App1
6	790.8	26.5	878	4	US-09-224-110-8		Sequence 8, App1
7	790.8	26.5	878	5	PCr-US95-07289-8		Sequence 8, App1
8	552.2	18.5	2970	4	US-09-193-5620-31		Sequence 31, App1
9	323.8	10.9	401	4	US-09-221-298-34		Sequence 34, App1
10	228.2	7.7	576	4	US-09-385-982-23		Sequence 23, App1
11	221.4	7.4	555	4	US-09-385-982-25		Sequence 25, App1
12	200.8	6.7	618	4	US-09-385-982-24		Sequence 24, App1
13	183.4	6.1	611	4	US-09-385-982-27		Sequence 27, App1
14	168.6	5.7	742	4	US-09-385-982-32		Sequence 32, App1
15	95.4	3.2	335	4	US-09-193-5620-14		Sequence 14, App1
16	52	1.7	7218	1	US-08-232-463-14		Sequence 14, App1
17	38.6	1.3	5156	2	US-09-091-432-3		Sequence 3, App1
18	36.6	1.2	2854	4	US-08-336-1654-66		Sequence 66, App1
19	36.4	1.2	8700	2	US-08-392-625-16		Sequence 16, App1
20	36.4	1.2	8700	2	US-08-466-961A-16		Sequence 16, App1
21	36.4	1.2	8700	2	US-08-645-193-18		Sequence 18, App1
22	36	1.2	3158	2	US-08-464-517-36		Sequence 36, App1
23	36	1.2	3158	2	US-08-246-361A-36		Sequence 36, App1
24	36	1.2	3158	3	US-08-463-772-36		Sequence 36, App1
25	35.6	1.2	4211	4	US-09-004-838-106		Sequence 106, App1
26	35.2	1.2	3058	4	US-09-276-531-107		Sequence 107, App1
27	35	1.2	1794	3	US-09-012-515A-13		Sequence 13, App1

28	1.2	1794	3	US-08-360-144A-13	Sequence 13, Appl
29	1.2	1794	5	PCF-US95-06722-13	Sequence 13, Appl
30	1.2	805	1	US-08-118-469A-6	Sequence 6, Appl
31	1.2	805	1	US-08-909-119-6	Sequence 6, Appl
32	1.2	6924	1	US-08-015-973-2	Sequence 2, Appl
33	1.2	6924	2	US-08-448-164-2	Sequence 2, Appl
34	1.2	19124	2	US-08-487-826B-13	Sequence 13, Appl
35	1.2	5923	4	US-09-064-922-3	Sequence 3, Appl
36	1.1	3600	4	US-08-855-910-7	Sequence 7, Appl
37	1.1	5319	1	US-08-169-927-1	Sequence 1, Appl
38	1.1	1566	4	US-08-871-572B-2	Sequence 2, Appl
39	1.1	2255	4	US-08-871-572B-3	Sequence 3, Appl
40	1.1	3447	1	US-08-255-995D-3	Sequence 3, Appl
41	1.1	3447	2	US-08-834-108-3	Sequence 3, Appl
42	1.1	3182	4	US-08-971-1395-1	Sequence 1, Appl
43	1.1	3183	4	US-08-413-135-1	Sequence 1, Appl
44	1.1	4030	4	US-08-569-214-4	Sequence 4, Appl
45	1.1	4030	4	US-08-593-236-4	Sequence 4, Appl

## ALIGNMENTS

RESULT 1  
US-09-193-562D-27

```

Sequence 27, Application US/09193562D
Patent No. 6309857
GENERAL INFORMATION:
APPLICANT: Pauli, Benedicht U.
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
FILE OF INVENTION: Activated Chloride Channel-Adhesion Molecules
FILE REFERENCE: 18617.0052
CURRENT APPLICATION NUMBER: US/09/193,562D
CURRENT FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US/60/065,922
PRIOR FILING DATE: 1997-11-17
NUMBER OF SEQ ID NOS: 47
SEQ ID NO 27
LENGTH: 3007
TYPE: DNA
ORGANISM: Homo sapiens
US-09-193-562D-27

```

Query Match	99.68;	Score 2971.8;	DB 4;	Length 3007;
Best Local Similarity	99.88;	Pred. No. 0;		
Matches 2976;	Conservative 0;	Mismatches 7;	Indels 0;	Gaps 0

[illegible]

Db 383 GGTAAATGATGAACCTACACTGACAGATGGGCAACTGTGGAGAGAAAGGTGAAGATC 442  
Qy 421 CACCTCACTCCTGATTTTCATTGTCAGAGAAAAAGTTAGCTGAATATGACACAGTAG 480  
Db 443 CACCTCACTCCTGATTTTCATTGTCAGAGAAAAAGTTAGCTGAATATGACACAGTAG 502  
Qy 481 GATTTTGCATGAGAGGGGCTCATCTACAGATGGGGATTTTGGAGAGATCATATGAT 540  
Db 503 GCATTTGTCATGAGAGGGGCTCATCTACAGATGGGGATTTTGGAGAGATCATATGAT 562  
Qy 541 GAGAAATTTCTACTTATTCATGGAAGAAATACAGCAGTAAGATGTTTCAGCAGTATTACT 600  
Db 563 GAGAAATTTCTACTTATTCATGGAAGAAATACAGCAGTAAGATGTTTCAGCAGTATTACT 622  
Qy 601 GGTACAAATGTAGTAAGAAGTGTACAGGAGCGAGCTGTTTACACCAAAAGATGACATTC 660  
Db 623 GGTACAAATGTAGTAAGAAGTGTACAGGAGCGAGCTGTTTACACCAAAAGATGACATTC 682  
Qy 661 AATTAAGTAAAGAGACTCATATGAAAAAGATGTAGTTTGTCTCCATCCCGCAGAGC 720  
Db 683 AATTAAGTAAAGAGACTCATATGAAAAAGATGTAGTTTGTCTCCATCCCGCAGAGC 742  
Qy 721 GAGAAAGCTTCTATTAATGTTTGCACAACAATGTTGATTTCTATAGTTGAATTCGTACAGAA 780  
Db 743 GAGAAAGCTTCTATTAATGTTTGCACAACAATGTTGATTTCTATAGTTGAATTCGTACAGAA 802  
Qy 781 CAAACCCACAAACAAGAGCTCCAAACAAGCAAAATCAAAATGCAATCCGAAACGACA 840  
Db 803 CAAACCCACAAACAAGAGCTCCAAACAAGCAAAATCAAAATGCAATCCGAAACGACA 862  
Qy 841 TGGGAGTGTATCCGATTTCTGAGACTTAAAGAAACCACTCCATGACACACAGCCA 900  
Db 863 TGGGAGTGTATCCGATTTCTGAGACTTAAAGAAACCACTCCATGACACACAGCCA 922  
Qy 901 CCAATATCCACCTTCTCATTGCTGACAGATTGACAAAAGATTTGTGTGTTAAGTCTTGAC 960  
Db 923 CCAATATCCACCTTCTCATTGCTGACAGATTGACAAAAGATTTGTGTGTTAAGTCTTGAC 982  
Qy 961 AATATGGAAGCAATGGGAGATGGTAACCGCTCAATCGACTGAATCAAGCAGCGACT 1020  
Db 983 AATATGGAAGCAATGGGAGATGGTAACCGCTCAATCGACTGAATCAAGCAGCGACT 1042  
Qy 1021 TTCTGCTGACAGAGTTGAGCTGGGGTCTTGGGTTGGATGGTGCATTTGACATGCT 1080  
Db 1043 TTCTGCTGACAGAGTTGAGCTGGGGTCTTGGGTTGGATGGTGCATTTGACATGCT 1102  
Qy 1081 GCCCATGTAAAGAGTACATACATACAGATTAACAGTGGCAGTGCAGGGGACACACTGGCC 1140  
Db 1103 GCCCATGTAAAGAGTACATACATACAGATTAACAGTGGCAGTGCAGGGGACACACTGGCC 1162  
Qy 1141 AAAAGATTACCTGACAGAGCTTCAGAGGAGCGTCACTGACAGCGGGCTTCGATCGGCA 1200  
Db 1163 AAAAGATTACCTGACAGAGCTTCAGAGGAGCGTCACTGACAGCGGGCTTCGATCGGCA 1222  
Qy 1201 TTTACTGTGATTAAGAAATATATCACTGATGATCTGAATTTGTGCTGTCAGCGAT 1260  
Db 1223 TTTACTGTGATTAAGAAATATATCACTGATGATCTGAATTTGTGCTGTCAGCGAT 1282  
Qy 1261 GGGGAACAACAACNTAATAGTGGGTGCTTAAAGAGGTCAAAACAATGGTGGCATATC 1320  
Db 1283 GGGGAACAACAACNTAATAGTGGGTGCTTAAAGAGGTCAAAACAATGGTGGCATATC 1342  
Qy 1321 CACACAGTCTGTTGGGGCCTTGCAGCTCAGAACTAGAGAGTGTGCCAAATGACA 1380  
Db 1343 CACACAGTCTGTTGGGGCCTTGCAGCTCAGAACTAGAGAGTGTGCCAAATGACA 1402  
Qy 1381 GGAGGTTTACAGACATATGCTTCAGATCAAGTTCAAGAACTAGGCTCATTTGATGCTTTT 1440  
Db 1403 GGAGGTTTACAGACATATGCTTCAGATCAAGTTCAAGAACTAGGCTCATTTGATGCTTTT 1462  
Qy 1441 GGGGCCCCCTTTATAGGAAAGAGAGCTGTCTCAGGCGCTCCATCCAGCTTGAGATGAG 1500  
Db 1463 GGGGCCCCCTTTATAGGAAAGAGAGCTGTCTCAGGCGCTCCATCCAGCTTGAGATGAG 1522

Qy 1501 GGATTAACCTTCAGAAACAGCCAGTGAATGAGCACAGTATCTGTGACAGCAGCTG 1560  
Db 1523 GGATTAACCTTCAGAAACAGCCAGTGAATGAGCACAGTATCTGTGACAGCAGCTG 1582  
Qy 1561 GGAAGAGACCTTTGTTTCTTATACCTGTGACAAACGACGCTCCCAATCTCTCTGG 1620  
Db 1583 GGAAGAGACCTTTGTTTCTTATACCTGTGACAAACGACGCTCCCAATCTCTCTGG 1642  
Qy 1621 GATCCCACTGACAGAACCAAGTGGCTTTGATGGGCAAAACACCAAAATGGCTTAC 1680  
Db 1643 GATCCCACTGACAGAACCAAGTGGCTTTGATGGGCAAAACACCAAAATGGCTTAC 1702  
Qy 1681 CTCCAATTCAGAGCATTGCTAAGGTTGGCACTTGGAAATACAGTCTGCAAGCAAGCTCA 1740  
Db 1703 CTCCAATTCAGAGCATTGCTAAGGTTGGCACTTGGAAATACAGTCTGCAAGCAAGCTCA 1762  
Qy 1741 CAAACCTTGACCTGACTGTACAGTCCGCTGCTCAATGCTACCTCCCTCCCAATTACA 1800  
Db 1763 CAAACCTTGACCTGACTGTACAGTCCGCTGCTCAATGCTACCTCCCTCCCAATTACA 1822  
Qy 1801 GTGACTTCCAAAGAGACAGGACACAGCAAAATCCCGACGCTCTGTAGTTATGCA 1860  
Db 1823 GTGACTTCCAAAGAGACAGGACACAGCAAAATCCCGACGCTCTGTAGTTATGCA 1882  
Qy 1861 AATATTCGCCAAGAGAGCTCCCAATTTCTCAGGGCAGTGTACAGCCCTGATTAATCA 1920  
Db 1883 AATATTCGCCAAGAGAGCTCCCAATTTCTCAGGGCAGTGTACAGCCCTGATTAATCA 1942  
Qy 1921 GTGATGAAAAACAGTATCTTGGAACTAGTGAATGAGAGGAGTGTATGCTACT 1980  
Db 1943 GTGATGAAAAACAGTATCTTGGAACTAGTGAATGAGAGGAGTGTATGCTACT 2002  
Qy 1981 AAGGATGAGCGTGTCTACTCAAGGATTTTACAACTTATGACAGAAATGATGATACAGT 2040  
Db 2003 AAGGATGAGCGTGTCTACTCAAGGATTTTACAACTTATGACAGAAATGATGATACAGT 2062  
Qy 2041 GTTAAAGTCCGGGCTCTGAGAGAGTTAAACGACCAAGCAGAGTGTATACCCAGCAG 2100  
Db 2063 GTTAAAGTCCGGGCTCTGAGAGAGTTAAACGACCAAGCAGAGTGTATACCCAGCAG 2122  
Qy 2101 AGTGGAGCACTGTACATACCTGCTGATTTGAAATGATGAATCAATGAAATCACCA 2160  
Db 2123 AGTGGAGCACTGTACATACCTGCTGATTTGAAATGATGAATCAATGAAATCACCA 2182  
Qy 2161 AGACCTGAATTAATTAAGATGATGTTCAACAACAAGAGTGTGTTACGCAAAATCC 2220  
Db 2183 AGACCTGAATTAATTAAGATGATGTTCAACAACAAGAGTGTGTTACGCAAAATCC 2242  
Qy 2221 TCGGAGGCTCATTTGTGGCTTGTGATGTTCCAAATGCTCCCATCTGATCTTCCCA 2280  
Db 2243 TCGGAGGCTCATTTGTGGCTTGTGATGTTCCAAATGCTCCCATCTGATCTTCCCA 2302  
Qy 2281 CTTGGGCAAAATCACGACCTGGAAGGCGGAAATTCAGGGGGGAGCTCATTAATCTGACT 2340  
Db 2303 CTTGGGCAAAATCACGACCTGGAAGGCGGAAATTCAGGGGGGAGCTCATTAATCTGACT 2362  
Qy 2341 TGGACAGCTCTCGGGGATGTTATGACATGAAACGCTCACAGTATATCATTCGAAATA 2400  
Db 2363 TGGACAGCTCTCGGGGATGTTATGACATGAAACGCTCACAGTATATCATTCGAAATA 2422  
Qy 2401 AGTACAAATTTCTTGTATCTCAGACCAAGTTCAAAGATCTTCAAGGAAATACTACT 2460  
Db 2423 AGTACAAATTTCTTGTATCTCAGACCAAGTTCAAAGATCTTCAAGGAAATACTACT 2482  
Qy 2461 GCTCTCATCCCAAGAGCAACTCTGAGAGAGTCTTTTGTGTTAAACAGAAACATTT 2520  
Db 2483 GCTCTCATCCCAAGAGCAACTCTGAGAGAGTCTTTTGTGTTAAACAGAAACATTT 2542  
Qy 2521 ACTTTGAAAAATGGCAGATCTTTTCATTTGATTCAGGCTTTGATTAAGTGCATG 2580  
Db 2543 ACTTTGAAAAATGGCAGATCTTTTCATTTGATTCAGGCTTTGATTAAGTGCATG 2602

Query Match	30.28;	Score 900.2;	DB 4;	Length 3317;
Best Local Similarity	61.48;	Pred. No. 2.6e-257;		
Matches 1635;	Conservative	0;	Mismatches 978;	Indels 48; Gaps 10;
QY	5	TCACAGGGAGATGTACACCAATGGGGCCATTAAAGTTCGTGTTCATCTTGATTTCTC	64	
Db	43	TTACGTAAACATGTCACAAAATGGTGTCTGTGTGTGTAAATGTTATTTCTGTTCCTAACTTTGC	102	
QY	65	ACCTTCTGGAAGGGGCCCTGAGTAAATTACATTCATTCACCTGACACACATGGCTATGAAG	124	
Db	103	ATCTCTTCCCTGG---AATGAAAGTTTAAATGTTAAATTTGATTTAAACATGGGTATGATG	159	
QY	125	GCATTTGCTTGGCATTCGACCCCATGTGCGCAGAAAGATGAACACTTCATCAACAAATTA	184	
Db	160	GCATTTGCTTGGCATTTAAACCCCATGTGCGCAGAAAGATGAACAACTCATTTGAAAAATTA	219	
QY	185	AGGAAATGTTGACCCAGGCATCTCTGTAATCTGTTTGAAGCTTAGAGAAAGCATTTTATT	244	
Db	220	AGGAAATGTTGACCAAGCTTCTACTTACCTGTGTTTTCAGACCCCAAGAAAGAGTTTATT	279	
QY	245	TCAAAAATGTTGCCATTTTGAATTCCTGAAACATGGAAACAAAGGCTGACTATGTGAAC	304	

Db	280	TCAGGAATGTCAGCATTTTAAATTC	CAATGACCGTGGAAATCAAAATCTAGATCTTCAC	339
Qy	305	CAAAACCTTGAGACCTTACAAAAATG	CGATGTTCTGGTCTGAGCTACCTCCAGGTA	364
Db	340	CAAAACAGAAATCTATGACCGAGCA	AGTGTCTAGTCTTAATCCATCTCAAAATATG	399
Qy	365	ATGATGAAACCTTACCTGAGCAGAT	GTGGGCAACTGTGGAGAGAGGGTGAAAGATCCAC	424
Db	400	GAGATATGCCCTATACACTTCATAT	TATGGAAGGTGGAGAAAGAAAATATATACAT	459
Qy	425	TCATCCTCGATTTTATGTCAGAGAA	AAAAAGTGTAGCTGAATATGAGCCACAAGGTAGCGAT	484
Db	460	TTACTCCAAACTTCTTTGTGACTAA	TAATTTCCATCTATGGGTCCGAGGCAAGATAT	519
Qy	485	TTTGCCATGAGTGGGCTCATCTCAG	ATGGGAGCATTTTACAGATACATATATGATGAGA	544
Db	520	TTTGTCATGAGTGGGCCCATCTCCG	TGGGGAATTTTATATAGATATATGTGACACAC	579
Qy	545	AATTCCTACTATCC--AATGGAAGA	TATACACAGCTAAGATGTTTCAGCAGGTATTA	601
Db	580	CATCTCATATTTCCAGAAAGACAGT	ATGGAACACAAAGATGTTCACATCATATTA	639
Qy	602	GTACAAATGTAG--TAAAGAGTGT	CAGGAGCGACGTGTTCACCCAAAAGATGCACAT	658
Db	640	GTATTAATGTGGTTTTCACAAATG	CGCTGGAGCGCTGTATTAACAAGTCAATGACAC	699
Qy	659	TCATTAAGTAAAGGACCTATGAAAA	AGAGTGTGTTCTGCCAATCCGCGCAGA	718
Db	700	GTGACTCCAGACGAGGCTATATGAA	GCAAAATGTACATCTCTCCAAAAAATCCACGA	759
Qy	719	CGAGAAAGGCTTCATATATTTTGG	CACAACATGTTGATCTATAGTTGAATTTCTGATAC	778
Db	760	CTGCAAGGAATTCATATATGTTTAT	GTGCAAGTCCATCTGTGACTGAATTTTGTACAG	819
Qy	779	AACAAAACACACAAAGAAGCTCC	AACAGCAAAATCAAAATGTCAATCTCCGAGCA	838
Db	820	AAAAAAACACAAATGCAAGAGCTC	CAAACTCAAAACAAAATGTGCATGGCAAAAGCA	879
Qy	839	CATGGGAAGTATCCCGATTTCTG	SAGACTTTTAAGAAAACCACTCCTATGACA-----A	892
Db	880	CATGGAGTATATCATATGCAATCT	GTGGACTTTTCAGATCAATCTCCACAGACAAATGA	939
Qy	893	CACAGCACCAAAATCCCACTTC	CTCAATGCTCGAGATTGGACAAGAAATGTGTGTAG	952
Db	940	ATCCACCGACATCATCTCACTTT	CACTGTCTCAAGTCCAAACAGGGGTAGTCTGTGG	999
Qy	953	TCCTTGACAATCTGSAAGCATGG	CGACTGTGAACCGCCTCAATGCAATCAAGCAG	1012
Db	1000	TACTTTGAATATCTGGAAGCATG	CTGACGAAGACCGTCTCTTCAATTAAGATCAAGAG	1059
Qy	1013	GCCAGCTTTTCTGCTCGACAGCA	GTTGAGCTGGGGTCTGGGTGTGGATGTGACATTTG	1072
Db	1060	CAGAACTATATCTGATTTCAAGT	TATTTGAAGAAAGGATCTTTAGTTGGATGTTACATTTG	1119
Qy	1073	ACAGTGGCCCATGTCAAGAGTGA	CTCATATACAGTTAAACGTGGCAGTGCAGGGGACA	1132
Db	1120	ACAGTGTGCTGAATCCAAAATCA	TCATAACAGAAATATCATATATATGTGTTTACCAA	1179
Qy	1133	CACCTGCCAAAAGATTTACCTCG	CAGACGCTTCAAGGAGGACGTCCATCTGCAGCGGGCTTC	1192
Db	1180	AGATACCGGCAAAATCCTCCTCA	GTAGTAAATGTTGGTGAACCTTCATTTGTGAGAGGCTCA	1239
Qy	1193	GATCGCATTTACTGTGATTAAGAA	AAA--AATATCCAACTGATGTGATCTGAATTTGTGC	1249
Db	1240	AAGGAGGATTTCCAGGCAATTA	TATCCAGAGTACAGAGTATCTTGTTCTCAAAATCATAC	1299
Qy	1250	TGCTGAGGAGATGGGGAAGACA	CACTATTAAGTGGGGCTTTTAACAGGTCACAAACAAAGTG	1309
Db	1300	TATTTACTGATGGGAAGATTA	TGAATTAATTTATCTGCTTTAGGATGTAAACGAAAGTG	1359
Qy	1310	GTGCAATCATCCACACAGTGC	TTTGGGGCCTTGTGACGCTCAAGAACTAGAGAGCTGT	1369

Db 1360 GTGCATATCATCCACACATTCGCTGGGACCCCTGCTGCTCCAAAGACATGAGACATTC 1419  
QY 1370 CCAAAATGACAGAGGTTTACAGACATATGCTTCAGATCAAGTTGAGAAATGGCTCA 1429  
Db 1420 CAAATATGACAGAGATATCGTTTTTGGCAATTAAGACATA-----ACTGGCTTAA 1473  
QY 1430 TTGATGCTTTGGGGCCCTTTCATGAGAAATGAGAGCTGTCTCATAGGCTCCTCAAC 1489  
Db 1474 CTAAATGCTTCAATGAAATTTATCTAGAAAGTGAAGACATCTCAGAGGCTATTCAGT 1533  
QY 1490 TTGAGATGAGGATTAACCTCCAGAACAGCCAGTGAATGATGAGACATGATCGTG 1549  
Db 1534 TGGAAAGCAAGCTTGAAATTTACGAGAAAGAAAGATTAACGCGACAGTGGCTGAG 1593  
QY 1550 ACAGACCGCTGGGAAAGACACTTTGTTCTTATCCTTGACCTTGACACGCGCTCCCAAA 1609  
Db 1594 ACAGTACAGTTGGAAATGACACTTCTTTGTTGTCATGACATGACAAATCAAAAACCGAAA 1653  
QY 1610 TCCCTGCTGGGATCCCATGGACAGAGCA-----AGGTGGCTTTGTATGGACA 1660  
Db 1654 TTGTTCTCAAGATCCAAAGAAAGAAATATTAACCTCGGATTTCAAGAAAGATTAAGT 1713  
QY 1661 AAAACACAAATGAGCTTACTCTCAATCCAGGACATTCCTAAGTTGGCATTTGAAAT 1720  
Db 1714 TAAATTTGATCTGCTCGTGTGCAATTAACCTGTATTTGAGAGACAGTACTTGACAT 1773  
QY 1721 ACAGTCT-----GCAAGCAAGCTCACAACCTTTGACCCCTGATGTCAGCTCCCGTG 1771  
Db 1774 ACAGCTTTTAAATTAATCAATGACGCTCAATGCTAAATGCTAAACAGTACAGTACGAG 1833  
QY 1772 CGTCAATGCTTACCTGCTCCATTAATTAACAGTGAATTCCTCAAAAGCAAGACAGCAGCA 1831  
Db 1834 CAAAGATGCTACTATATACCCCGAGTAAATTCAGACAGCTCATAGATCAACATACAGCA 1893  
QY 1832 AATTTCCCAAGCCTCTGTGATGTTATGCAAAATTTGCCAAGAGACCTCCCAATTTCTCA 1891  
Db 1894 ATATATCTAGCCCAATGATGTTATGACAACTGATGCAAGGCTTTTCCCTGCTACTGG 1953  
QY 1892 GGGCCAGTGCACAGCCCTGATTAAGTACAGTGAATGAGAAAGCAAGTACTTCCCTGAGACTAC 1951  
Db 1954 GAATGCTGTAAATGAGCTATTAAGAAACCAAGATGACATCAAGTAACTTTGGAGCTCT 2013  
QY 1952 TGGATATGAGAGAGTGTGCTACTACTAATGAGATGAGGCTGTCTACTCAAGGTATTTCA 2011  
Db 2014 GGGACATGCTGAGAGTGTGATGATGCTCAAGATGATGATGATGATGATGATGATGATGAT 2073  
QY 2012 CAACCTATGACAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2071  
Db 2074 CAGATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2133  
QY 2072 CAGCAGAGAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2131  
Db 2134 CGGCTAGGCTTAATTTAAGACACACAGAAAGTTCTATATGTTCCAGAGGCTAGCTTG 2193  
QY 2132 AGAATGATGATTAATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2191  
Db 2194 AAAACGGTAAATTAATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2253  
QY 2192 ACAAGCAAGTGTGTTGAGAGAAACATCTCGAGAGGCTATTTGGCTGTGATGATGCT 2251  
Db 2254 CTAAATTAAGAGACTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2313  
QY 2252 CAATATGCTTCCA-----TACTGATGCTTCCCACTGGCCAAATATCCAGGACCTGAAGCGG 2308  
Db 2314 CTCTCTCTGTAATACACCTTCTGTGTCTCCACCACTAAATTAATTAATTAATTAATTAATTAAT 2373  
QY 2309 AAATTTCAAGGAGGAGTCTCATTAATCTGATTTGAGAGCTCTCTGGGATGATTAATGAC 2368  
Db 2374 AGTTCAAGAG--ATTATATTAATCACTTTCATGAGAGCGCCCGCAAGTGTCTAGATA 2430  
QY 2369 ATGGAACAGCTCAACATATATCTTGAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2428  
Db 2431 AAGGAAAGCCACAGCTTACTATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2490

QY 2429 AGTTCAATGAATCTGTCAGTAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2488  
Db 2491 ATTGTCACAAATGCGACTTTAGTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2550  
QY 2489 AGGAAGCTTTTGTGTTAAACAGAAACATTAATTTTGAATAATGACAGATCTTTTCA 2548  
Db 2551 AAGAAATTTGAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2610  
QY 2549 TTGCTATTCAGGCTGTATTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2608  
Db 2611 TTTCAGTCCAAACCCATCAACGAGAGCAATTCATCTCAGAGGTTTCTCATTTGATCAAG 2670  
QY 2609 TATCTTTGTTTATCTCCAC 2629  
Db 2671 CAATCAATTAATTAATCTCTAC 2691

RESULT 3  
US-09-193-562D-33  
; Sequence 33, Application US/09193562D  
; Patent No. 6309857  
; GENERAL INFORMATION:  
; APPLICANT: Pauli, Benedicht U.  
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
; TITLE OF INVENTION: Activated Chloride Channel-Adhesion Molecules  
; FILE REFERENCE: 18617, 0052  
; CURRENT FILING DATE: US/09/193, 562D  
; PRIOR APPLICATION NUMBER: US/60/065, 922  
; PRIOR FILING DATE: 1997-11-17  
; NUMBER OF SEQ ID NOS: 47  
; SEQ ID NO 33  
; LENGTH: 3022  
; TYPE: DNA  
; ORGANISM: Mus musculus  
US-09-193-562D-33

Query Match 28.2%; Score 840.6; DB 4; Length 3022;  
Best local similarity 60.5%; Pred. No. 1.3e-239;  
Matches 1554; Conservative 0; Mismatches 974; Indels 39; Gaps 9;

QY 91 TCATCTATTCAGCTGGAACAACATGCTTATGAAGCATTTGCTTGCATTCGACCCCAAT 150  
Db 81 TCCATGTCATCTCAACAGCAATGATAGAGGCTGTGATGCTATTAACCCCAAT 140  
QY 151 GTGCCAGAGATGAACACATTCATTAACAATTAAGAGATGATGATGATGATGATGATGATGATGATGAT 210  
Db 141 GTGCCAGAGAGCAAAAGGCTCATCCAGACATTAAGAAATGATGATGATGATGATGATGATGATGATGAT 200  
QY 211 TATCTGTTGAAGCTACAGAAAGCATTTTATTTCAAAAATGTTGCCATTTGATTCCT 270  
Db 201 TACCTGTTGAAGCCAGCAAGAGAGATTTATTTGAGAAACATTAAGATTAATTAATTAATTAATTAAT 260  
QY 271 GAACATGGAAGCAAGAGGCTGATGAGACCAAACTTGAGACTACAAAAATGCT 330  
Db 261 ATGACCTGGAAGTGAATGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 320  
QY 331 GATGTTCTGTTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 390  
Db 321 GAGCTCATATGTTGCGATCTCTACCTGCAACATGAGAGAGACCCCTACACCTTCAGTAT 380  
QY 391 GGCACCTGTGAGAGAGAGGCTGAAGAGATCCACTCTCTGATTTTCATTTGAGAGAAA 450  
Db 381 GGACAGTGTGAGAGAGAGAGAGAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 440  
QY 451 AAGTTAGCTAATTAATGACACAGAGATGAGGCAATTTGTCATGAGGCTCATTAACGA 510  
Db 441 AACTTTGATTAATGAG 500  
QY 511 TGGGAGATTTTACGAGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 567  
Db 501 TGGGAGATTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 560









Db 1897 ACAGCTATTACCTAGCCAGATGATGTTATGATGATGTCAGTCAAGGGTTCTCT 1956  
Oy 1885 ATTCTCAGGGCCAGTGCACAGCCCTGATGATGATGAAATGAAAAAGGTTCTCTG 1944  
Db 1957 GTTCTGGGAAATATTAACACCCATTATAGAAAATGAAGAGACATCAACTAATG 2016  
Oy 1945 GAACCTACTGATTAATGAGAGAGGTGCTGATGCTACTACTAGATGAGGTGCTACTCAAG 2004  
Db 2017 GAGCTCTGCGAATAGGGGAGAGCTGCTGATCTGTCAGAAATGATGATGCTACTCAAG 2076  
Oy 2005 TATTTACAACTTATGACACGAATGATGATGATGATGATGATGATGATGATGATGATG 2064  
Db 2077 TATTTACAACTTATGACACGAATGATGATGATGATGATGATGATGATGATGATGATG 2136  
Oy 2065 GTTACGAGCAGAGGAGAGATGATGATGATGATGATGATGATGATGATGATGATGATG 2124  
Db 2137 AAAAACAAGCTAGGCT 2190  
Oy 2125 TGGATTGAGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2184  
Db 2191 TATGCTGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAATGAA 2250  
Oy 2185 GTTCAACACAAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2244  
Db 2251 GAAGGAGCTCAACACAGAGCTGATGATGATGATGATGATGATGATGATGATGATGATG 2310  
Oy 2245 GATCT 2301  
Db 2311 GAGAGCT 2370  
Oy 2302 AAGCGGAAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2361  
Db 2371 GAGCTAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2427  
Oy 2362 TATGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2421  
Db 2428 CTCGATTAAGAGAGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 2487  
Oy 2442 AGAGCAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2481  
Db 2488 CAAAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2547  
Oy 2482 AACTGAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2541  
Db 2548 GGTTCAGTAGAAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2607  
Oy 2542 CTTTTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2601  
Db 2608 TTTCTATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2667  
Oy 2602 GCAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2636  
Db 2668 GCACAGCACTAATCTTATCTCCACAGAAC 2702

RESULT 5  
US-08-469-667-8  
Sequence 8, Application US/08469667  
Patent No. 5733748  
GENERAL INFORMATION:  
APPLICANT: Yu, Guo-Liang  
APPLICANT: Rosen, Craig  
TITLE OF INVENTION: Colon Specific Genes and Proteins  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Carella, Byrne, Bain, Gilfillan, Cecchi,  
STREET: 6 Becker Farm Road  
CITY: Roseland  
STATE: NJ  
COUNTRY: USA  
ZIP: 07068-1739  
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/469,667  
FILING DATE: 06-JUN-1995  
CLASSIFICATION: 536  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-435  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
US-08-469-667-8

Query Match 26.5%; Score 790.8; DB 1; Length 878;  
Best Local Similarity 97.9%; Pred. No. 3.9e-225;  
Matches 820; Conservative 1; Mismatches 15; Indels 2; Gaps 2;

Oy 1992 TGTCTACTCAAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2051  
Db 1 TGTCTACTCAAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 60  
Oy 2052 GGCCTCTGGGAGAGATTAACGAGCAGAGAGATGATGATGATGATGATGATGATGATGAT 2111  
Db 61 GGCCTCTGGGAGAGATTAACGAGCAGAGAGATGATGATGATGATGATGATGATGATGAT 120  
Oy 2112 GTACATACCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2171  
Db 121 GTACATACCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 180  
Oy 2172 TAATAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2231  
Db 181 TAATAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 240  
Oy 2232 ATTTGTGCTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2291  
Db 241 ATTTGTGCTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 300  
Oy 2292 CACGACCTGAGAGGCGGAAATTAACGAGGAGCTGATGATGATGATGATGATGATGATG 2351  
Db 301 CACGACCTGAGAGGCGGAAATTAACGAGGAGCTGATGATGATGATGATGATGATGATG 360  
Oy 2352 TGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2411  
Db 361 TGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420  
Oy 2412 TCTTGATCTAGAGACAGTCAATGATGATGATGATGATGATGATGATGATGATGATGAT 2471  
Db 421 TCTTGATCTAGAGACAGTCAATGATGATGATGATGATGATGATGATGATGATGATGAT 480  
Oy 2472 AAAGGAGCCAACTCTGAGAAAGTCTTTTGTAAACAGAAAACATTTACTTTGAAA 2531  
Db 481 AAAGGAGCCAACTCTGAGAAAGTCTTTTGTAAACAGAAAACATTTACTTTGAAA 540  
Oy 2532 TGGCAGACATCTTTTCAATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2591  
Db 541 TGGCAGACATCTTTTCAATGATGATGATGATGATGATGATGATGATGATGATGATGATG 600  
Oy 2592 ATCCAAATGCTCAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2651



APPLICATION NUMBER: PCT/US95/07289  
FILING DATE: 06-JUN-1995  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Ferraro, Gregory D.  
REGISTRATION NUMBER: 36,134  
REFERENCE/DOCKET NUMBER: 325800-265  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 201-994-1700  
TELEFAX: 201-994-1744  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 878 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 2..685  
CT-US95-07289-8

Query Match 26.5%; Score 790.8; DB 5; Length 878;  
Best Local Similarity 97.9%; Pred. No. 3.9e-225;  
Matches 820; Conservative 1; Mismatches 15; Indels 2; Gaps 2;

Oy 1992 TGCTACGACAGTATTCACACACTATGACACGAAATGTAGTACGTAAAGTGC 2051  
Db 1 TGCTACGACAGTATTCACACACTATGACACGAAATGTAGTACGTAAAGTGC 60

Oy 2052 GCGCTGGGAGAGATTAAACGACGACGAGAGAGTATACCCAGCAGAGTGCACACT 2111  
Db 61 GCGCTGGGAGAGATTAAACGACGACGAGAGAGTATACCCAGCAGAGTGCACACT 120

Oy 2112 GTACATACCTGGCTGGATGAGATGATGAATACATGAAATCCACCAAGCTGAAAT 2171  
Db 121 GTACATACCTGGCTGGATGAGATGATGAATACATGAAATCCACCAAGCTGAAAT 180

Oy 2172 TAATAGATGATGTTCAACCAAGCAGTGTTCAGCAAAATCCTGGGAGGCTC 2231  
Db 181 TAATAGATGATGTTCAACCAAGCAGTGTTCAGCAAAATCCTGGGAGGCTC 240

Oy 2232 ATTTGGCTTCTGATGTCACCAATGTCACATACCTGATCTCTCCACCTGGCCAAAT 2291  
Db 241 ATTTGGCTTCTGATGTCACCAATGTCACATACCTGATCTCTCCACCTGGCCAAAT 300

Oy 2292 CACGACCTGAAGCGGAAATTCACGGGGCAGTCTCATTAATCTGACACTGGACAGTCC 2351  
Db 301 CACGACCTGAAGCGGAAATTCACGGGGCAGTCTCATTAATCTGACACTGGACAGTCC 360

Oy 2352 TGGGATGATATGACCAATGGAACGTCACAGATATATCATTCGAATTAAGTACAGTAT 2411  
Db 361 TGGGATGATATGACCAATGGAACGTCACAGATATATCATTCGAATTAAGTACAGTAT 420

Oy 2412 TCTTGATCTCAGAGACAGTTCATGAAATCTCTCAAGTGAATACTAGTCTCTCATCC 2471  
Db 421 TCTTGATCTCAGAGACAGTTCATGAAATCTCTCAAGTGAATACTAGTCTCTCATCC 480

Oy 2472 AAAGAACCAACTCTGAGGAAGTCTTTTGTAAACCAAGAAACATTACTTTTGAATA 2531  
Db 481 AAAGAACCAACTCTGAGGAAGTCTTTTGTAAACCAAGAAACATTACTTTTGAATA 540

Oy 2532 TGGCACAATCTTTTCAATGCTATTCAGGCTGTATTAAGTTCATCTGAAATCAGAAAT 2591  
Db 541 TGGCACAATCTTTTCAATGCTATTCAGGCTGTATTAAGTTCATCTGAAATCAGAAAT 600

Oy 2592 ATCCAACTTGACAGAGTATCTTTGTTATTCCTCAGACAGTCCGACAGACAGACTAG 2651  
Db 601 ATCCAACTTGACAGAGTATCTTTGTTATTCCTCAGACAGTCCGACAGACAGACTAG 660

Oy 2652 TCTTGATGAAGAGTCTGCTCTTGT -CCTAATATTCAATGCAACAGCACTTCTTGCA 2710  
Db 661 TCTTGATGAAGAGTCTGCTCTTGTGCTTAATATCATGCAACAGCACTTCTTGCA 720

Oy 2711 TTCACATTTTAAAAATATGTAAGTGGATAGGAACCTGCAGCTGCATATAGCTAG 2770  
Db 721 TTCACATTTTAAAAATATGTAAGTGGATAGGAACCTGCAGCTGCATATAGCTAG 780

Oy 2771 GGTGAATTTTGTGAGATTAATAATTAATCAATTCATCTTTTGTGATTAATAA 2828  
Db 781 GGTGAATTTTGTGAGATTAATAATTAATCAATTCATCTTTTGTGATTAATAA 837

RESULT 8  
US-09-193-562D-31  
Sequence 31, Application US/09193562D  
Patent No. 6309857  
GENERAL INFORMATION:  
APPLICANT: Pauli, Benedicht U.  
TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium  
TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules  
FILE REFERENCE: 18617.0052  
CURRENT APPLICATION NUMBER: US/09/193.562D  
PRIOR APPLICATION NUMBER: US/60/065.922  
PRIOR FILING DATE: 1997-11-17  
NUMBER OF SEQ ID NOS: 47  
SEQ ID NO 31  
LENGTH: 2970  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-193-562D-31

Query Match 18.5%; Score 552.2; DB 4; Length 2970;  
Best Local Similarity 55.4%; Pred. No. 6.9e-154;  
Matches 1371; Conservative 0; Mismatches 1038; Indels 66; Gaps 13;

Oy 98 TTCACCTGAACACAAATGCTATGAAAGCATGTCGTTGCAATGACCCCAATGTCAG 157  
Db 206 TACAGCTTCAAGACAAATGCTATGAAAGCATGTCGTTGCAATGACCCCAATGTCAG 265

Oy 158 AAGATGAACAACCTATTAACAAATTAAGACATGTCGACCCAGCACTCTGTAATGCT 217  
Db 266 AAGATGAACAACCTATTAACAAATTAAGACATGTCGACCCAGCACTCTGTAATGCT 325

Oy 218 TTGAAGCTCAGAGAAAGCATTTTATTTCAAAAATGTTGCCATTTTGTATTCCTGAACAT 277  
Db 326 TTGAAGCTCAGAGAAAGCATTTTATTTCAAAAATGTTGCCATTTTGTATTCCTGAACAT 385

Oy 278 GGAAGACAAAGCTGACTATGTAAGACCAAACTTGACACCTTACAAAATGCTATGTTG 337  
Db 386 GGAAGACAAAGCTGACTATGTAAGACCAAACTTGACACCTTACAAAATGCTATGTTG 442

Oy 338 TGGTTCGCTGAGTCTACCTCCAGTAATGATGAACCTTACACCTGACAGATGGCAACT 397  
Db 443 TGGTTCGCTGAGTCTACCTCCAGTAATGATGAACCTTACACCTGACAGATGGCAACT 502

Oy 398 GTGGAGAGAGGTTGAAGATTCACCTCAGTCTGATTCATTTGACAGAAATAAGTT - 455  
Db 503 GTGGAGAGAGGTTGAAGATTCACCTCAGTCTGATTCATTTGACAGAAATAAGTT - 562

Oy 456 -AGCTGAATATGACACCAAGGTAGGCAATTTGTCATGAGTGGGCTCATCTACAGTGG 514  
Db 563 -AGCTGAATATGACACCAAGGTAGGCAATTTGTCATGAGTGGGCTCATCTACAGTGG 622

Oy 515 GAGTATTTGACAGATACATATATGATGGAATTTCTACTTATCCAAATGGA -GAAATG 571  
Db 623 GAGTATTTGACAGATACATATATGATGGAATTTCTACTTATCCAAATGGA -GAAATG 682

Oy 572 AAGCAGTAAGTGTTCACAGGATTTTATGTAACAAATGTAAGAAGTGCAGGAG 631  
Db 683 AAGCAGTAAGTGTTCACAGGATTTTATGTAACAAATGTAAGAAGTGCAGGAG 733

Oy 632 GCAGCTGTACCAAAAAGATGCACATTTCAATTAAGTAACAGACCTATGAAAAAGAT 691  
Db 734 GCAGCTGTACCAAAAAGATGCACATTTCAATTTAAGT -CTTTTAAAGAGAT 784

Qy	692	CTGAGTTTGTTCCTCCAAATCCGCGCAGAGGGAAGGGCTTCATATGTTGACCAACATG	751
Db	785	GCACCTTTTATCTACAAATAGCACCCAAAATGCACTGCATATATGTTATGCGAAAGTT	844
Qy	752	TTATATCTATAGTTGAATTTCTGTACAGAAACAAACACAAAGAGCTCCAAACAGC	811
Db	845	TATCTCTGTGTTGAATTTTGTAAATGCAAGTACCACAAACAGAACCAAACTCAG	904
Qy	812	AAATATCAAAATTCGATCTTCCAGACCATGTGGGAATGATCCGGATCTGAGSACTTGA	871
Db	905	AGAACCGAGATGTCACCTCTGAAAGGACATGGGATGATATACAGACTCTGCTGACTTC	964
Qy	872	AGAAAACCATCTCTAT-----GACAAACACACCCCAAAATCCCACTCTCATTTGCTGC	925
Db	965	ACCAACACTTCCCATGAAATGGAGACTGAGACTTCACACTGCTGCCAATCTCCCTGTAC	1024
Qy	926	AGATTGGACAAAGAAATTTGTGTATTAGTCTTTAGTACAAATCTGGAAAGCATGGCACCTGTA	985
Db	1025	AGGCTGTGTGCAAAAGTGGTCTGTTTAGTCTCGAATGTGTCCAGCAAGATGGCAGAGGCTG	1084
Qy	986	ACGCGCTCATGCACTGGAATCAAGACGAGCGCACCTTTTCTCTGCGACATTTGAGCTGG	1045
Db	1085	ACAGACTCTTCAACTTACAAACAGCCGACGAAATTTTATTGATGAGATGTTTAAATTC	1144
Qy	1046	GGTCTGGTGGGATGCTGACATTTTGACATGTGCTGCCCATGTACAAAGTACTCATAC	1105
Db	1145	ATACCTTCTGTGGCATATTTGCCATGTTTGACAGCAAGAGAGATCAGACCCACGCTACAC	1204
Qy	1106	AGATTAACACTGGCAGTGCAGACGAGGACACACTCGCCAAAAGATTAAC-----CTGCACAG	1159
Db	1205	AAATTAACGCAATGATGATGATCGAAATTTGCTGTTCATATCTGCCACACTGTATACAG	1264
Qy	1160	CTTCAGAGGAGCGTCCATCTGCGAGCGGCTTCGATCGGACTTTACTGTATAGAA--	1217
Db	1265	CTAAACAGACATCAGCATTTGTTTACGGCTTAAGAAAGATTTAGCTGGTTAAAAAC	1324
Qy	1218	-GAAATATCCACATGATGATCTGAAATTTGTCTGCTGTAGCGGATGGGAAACAACTA	1276
Db	1325	TGAATGAAAAGCTTATGGCTCTGTATGATATTTAGTGACACGCGGAATGATAGCTTC	1384
Qy	1277	TAAATGGGTCTTAAAGAGGTGTAACAAAGAGTGTCATCTCATCCACAGTCTGTTGG	1336
Db	1385	TTGGCAATTTGTTACCCACTGTGCTCAGAGATGTTTCAACAAATTCATCCATFGCCCTGG	1444
Qy	1337	GGCCCTCTGCAGCTCAAGAACTAGAGAGCTGTCCAAAATGACAGAGAGTTTACAGACAT	1396
Db	1445	GTTCACTCTGCGCCCAAACTCTGAGGAAATATACAGTTCATCAGSAGAGTTTAAAGTCT	1504
Qy	1397	ATGCTTCGATCAGTTCACAAACATAGGCTCATTTGATGCTTTTGGGCGCTTTCATCAG	1456
Db	1505	TTGTTCGAGATATATCAAACTCCAAATAGCATGATGATGATCTTTCAAGTATGAATTTCTCTG	1564
Qy	1457	GAAATGAGCTGTCTCTCAGCGCTCCATCCAGCTTAGAGCTTAAGGATTTAACCTCCAGA	1516
Db	1565	GAACTGAGAGATTTTCCAGCAACATTTTCAGCTTGAAGTACAGGTGAAAATGTCAAC	1624
Qy	1517	ACAGCCTAGTGAATAGGACAGATGATCTGTGACACGACCGGGAAAGACATTTGT	1576
Db	1625	CTCACCATCAATTAAGAAACACAGATGCTGTGATATATCTGTGGCACAACGACTATGT	1684
Qy	1577	TTCTATATACCTG---GACAAACGACGCTCCCAAAATCTTCTGTGGATTCACAGTGAGC	1633
Db	1685	TTCTAGTTACGTGGAGGCCAGTGTCTGCTCAGATTTATATTTGATCTGTGATGAC	1744
Qy	1634	AGAGCA-----AGTGGCTTTTGTAGTGTGACAAAACAAACAAATGGCTACCTCCAAA	1687
Db	1745	GAAATTACTACAAATATATTTTATTCACATCTTAATCTTTGGCAGAGCTAGTCTTTGGA	1804
Qy	1688	TCCCAAGCATTTGTAAGTTTGGCACTTGGAAATATAGTCTGCAAAGCAACT-----	1738
Db	1805	TTTCAGGAACGCTTAGCGTGGGACACTGCACTTACACCCGTAACATTAACCATTAATCTGC	1866

QY	1739	CACAACCTTGACCCCTGACCTGCTACGTCGCCCTGCGCCGTCGAATGTACCCCTGCAATTA	1798
Db	1865	TGCAAGGCCCTGAAAGTACAGATACCTCTTCGCGCCCTCAACTAGCTGTGCCCCAGCCA	1924
QY	1799	CAGACACTCTCCAAACGACAAACAGACACACGACGACAAATTCGCCACCCCTGTGATGTTATG	1856
Db	1925	CTGTGGAAAGCCTTGTGTGGAAAGAGACAGCCCTCCATTTCTTCATCTCTGTAGATTTATG	1984
QY	1859	CAAAATTCGCCAAGAGACCTCCCCAATTCCTCAGGGCCAGTGTACACAGCCCTGATTTGAT	1918
Db	1985	CCAAATGTGAAACACAGGAGATTTTATTCCTCAATTCCTTATATCCCACTGTACATGCACAGTTGAGC	2044
QY	1919	CAGAAATGAAAAACAGTTACCTTGGAACTGATGATGATATGAGCAGGTGCTGATGCTTA	1978
Db	2045	CAGAGACTGAGGATGCTGTTCATCGCTGAGACCTCTTATATGATGAGCAGGTGCTGATGTTA	2104
QY	1979	CTAAGATGACGTGTGTACTCAAGATATTTCACAACTTATGACACGAATGGTATGATACA	2033
Db	2105	TAAAAAATGATGGAATTTATCTCGAGGTATTTTTCCTTTGCTGTGAAATGGTATGATATA	2166
QY	2039	GCTGTAAGTGCGGGGCTCTGGAGAGATTTAAGCAGCAGACAGCAGAGATGATACCCAGC	2099
Db	2165	GCTTGAAGTGCATGTCAATCACTCTCCACGACTAAGCACCACCCAGCCACTATTCGAG	2222
QY	2099	AGAGTGAACACTGTATACATACCTGGCTGTGATTGAGATGATGAATACATGATATCCAC	2155
Db	2225	GGAGACTGCTATGTATGTATGACAGAGTTACACAGCAAAAGCTATATTCAGATGAATGCTAC	2284
QY	2159	CAAGACTGGAATTAATATAGAGATGATGTTCAACACAGCAAGAGTGTGTTTCAGCAGAAACAT	2211
Db	2285	CAGGAAATTCAGTATGAGCGCAAAATAGAGAGAGCGCAAG--TGGGCTTTAGCCGAGTCA	2344
QY	2219	CCTCGGAGGCTCATTTGTGTGCTTCTGATGTCCCAATGCTCCATACCTGATCTCTCC	2271
Db	2342	GCTCAGGAGGCTCCTTTTCACTGCTGGAGATGCTCAGCTGGCCCCCAGCTGATGTGTTTC	2400
QY	2279	CACCTGGCCAAATCACGACCTGAAAGCGGAAATTCACGGGGGCAAGTCTCATTAATCTGA	2333
Db	2402	CACCAATGCAAAATTTATCTGGAAGCTGTAA--AAGTGAAGAGGAATTAACCTAT	2455
QY	2339	CTTGGACAGCTCCTGGGATGATTATGACATGAGACAGCTCAACAGTATATCTTCGAA	2399
Db	2459	CTTGGACAGCACTGGAAGACGTTTGTATCGGGCCAGGCTACAGCTATGAATTAAGAA	2511
QY	2399	TAAATCAAGTATCTTATCTCAGAGACAAAGTCAATGAATCTCTCAAGCAAGAAATACA	2455
Db	2519	TGAGTAAAGTCTACAGATATCCAAAGATGCTTTAACTATTTTATGTAATATCAT	2577
QY	2459	CTGTCTCTCATCCCAAGAGACCAACTGTGAGGAAGCTTTTGTGTTTAAACGAAAGACA	2511
Db	2579	CAAAGCGAAATCTTACGACAGTGGCATCAGAGAGATTAATTAGCTTCTACCCAGATTT	2633
QY	2519	TTACTTTGAAAAATG 2533	
Db	2639	CCACGATGAGACCTG 2653	
RESULT 9			
US-09-221-298-34			
; Sequence 34, Application US/09221298			
; Patent No. 6284241			
; GENERAL INFORMATION:			
; APPLICANT: Xu, Jiangchun			
; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY AND DIAGNOSIS			
; FILE REFERENCE: 210121.471			
; CURRENT APPLICATION NUMBER: US/09/221.298			
; NUMBER OF SEQ ID NOS: 112			
; SOFTWARE: FastSeq for Windows Version 3.0			
; SEQ ID NO 34			
; LENGTH: 401			
; TYPE: DNA			

```

RESULT 9
US-09-221-298-34
; Sequence 34, Application US/09221298
; Patent No. 6284241
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER
; FILE REFERENCE: 210121.471
; CURRENT APPLICATION NUMBER: US/09/221,298
; CURRENT FILING DATE: 1998-12-23
; NUMBER OF SEQ ID NOS: 112
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 34
; LENGTH: 401
; TYPE: DNA
;

```



Tue Oct 22 11:22:19 2002

us-09-049-696-20.rn1

Page 12

OY	2174	ATAGGATGATGTTCACACACAGCAAGTGTCTTTAGCGAAACATCCTGGGAGGCAT	2233
Dd	61	ATTGAGGTAC - --TCAGACCACCTTGAGGATTTTAGCGGAACAGCATCCGAGGTGAT	117
OY	2234	TTCGAGCTTCGATGTGCCAATAATGTCCTCATCTGATCTCTTCCACCTG6CCAATCA	2293
Dd	118	TTTGtGtntCACAAAGTCCAAAGCCTTCCTGTGCTGACCATAACCAAGTCAAATCA	177
OY	2294	CCGACTGGAAGCGGGAATTCACGGGGGCAgTCATTATCTGAGCTTGSAGAGTCTGT	2353
Dd	178	CAGACCTTGATGCGACAGNCATGAG - --ATPANTTTATTTTTCATATGAGACGACCAG	234
OY	2354	GGAATGATTTATGACATGAGAACGCTCACAGAATATCATTCGTAATAGTACAAATATC	2413
Dd	235	GAGTAAATTTTGATGTTGGAAAAAGTTCAAGNATATATCATTAAGAAPAAGTGAAGTATTC	294
OY	2414	TTGATCTCAGACAGACTCAATGAATCTCTCTCACTGTAATCTACTGCTCATCCCA	2473
Dd	295	TTGATCTPAAGAGACAGTTNGATGATGCTCTTCMAATTAATCTCTGATCTGTCCACA	354
OY	2474	AGGAAGCAACTCTGAGSAGTCTTTTTGTTTAAACAGAAAACATTACTTTTGAANAATG	2533
Dd	355	AGGAGGCCAACTCCANAGAAAGCTTGTCNTTTAAACAGAAAATNTCTCAGAAAATFG	414
OY	2534	GCACAGATCTTTTCATGTCTATCAGGCTGTGATPAAGTCGATCTGAATCAGAAATAT	2593
Dd	415	CAACCCACATATTTATTGCCTTTAAAGTATATGATANAG - CATTTGACATC - NNAGTN	471
OY	2594	CCACATGTGCACAGATNATCTTGTTTATCTCTCAGACA	2632
Dd	472	TTCCATATTGACAAAGTACCTTGTTATCCCTCAGCAA	510

```

RESULT 12
US-09-385-982-24/c
; Sequence 24, Application US/09385982
; Patent No. 6262334
; GENERAL INFORMATION:
; APPLICANT: ENDEGE, WILSON O., ET AL.
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
; FILE OF INVENTION: PRODUCTS: II
; FILE REFERENCE: CCDNA-260XX
; CURRENT APPLICATION NUMBER: US/09/385,982
; CURRENT FILING DATE: 1999-08-30
; EARLIER APPLICATION NUMBER: 09/328,111
; EARLIER FILING DATE: 1999-06-08
; EARLIER APPLICATION NUMBER: 60/117,393
; EARLIER FILING DATE: 1999-01-27
; EARLIER APPLICATION NUMBER: 60/098,639
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 544
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 618
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(618)
; OTHER INFORMATION: n = A,T,C or G
US-09-385-982-24

```

Query Match	6.7%	Score 200.8	DB 4	Length 618
Best Local Similarity	69.5%	Pred. No. 7.9e-50		
Matches 303	Conservative	0	Mismatches 127	Indels 6
			Gaps 2	
QY 2251	CCAAATGCTCCCTACTGATCTCTCCACACTGGCCAAATCCACGACGTGAGGCGGAA	2310		
Db 516	CCCAAGCTTCCCTTCTTACCAATATCCCAATCAAAATCAGACAGCTTGATGACACA	457		
QY 2311	ATTACGGGGGACGATCTCATTAATCTGACTTGGAGACGCTCCTGGGGATGATTGACCAT	2370		

Db	456	gTTCATGAGS--ATAGATTATTCCTTACATGACAGCACGACGAGTAATTTTGGAGTT	400
OY	2371	GGAACAGCTCACAAGTATATCATTCGAAATAGTACAAAGTATTTGATCTCAGACACAG	2430
Db	399	GGAAATATTCAGGTATATCATTAAGTAATAGTACAAAGTATTTCTGATCTAAGAGACGT	340
OY	2431	TTCAATGATCTCTTCAAGTGAACTACTGCTCTCATCCCAAGAGGACCACTGTGAG	2490
Db	339	TTTATGATGCTCTTCAGAAATTAAGTACTGATCTGTCCACCAAGAGGCCAACTCCAG	280
OY	2491	GAACTCTTTTGGTTTAAACAGAAACATTTACTTTTGAATAGCGACAGATCTTTCAAT	2550
Db	279	GAAAGCTTGATTTAAACACGAAATATCTCAGAGAAATAGCAACCAATATTATTT	220
OY	2551	GCTATTCAGGCTGTGTGATAGTGCATCTGAAATCGAAATATCCACATTGCACAGATA	2610
Db	219	GCCATTAAAGTATAGTATTAAGTAAGCAATTGACATCAAAAGTATCCAAATATTCACAAATA	160
OY	2611	TCCTTTGTTATTCCTCCACAGACTCCGCCAGATA---CACAGTAGCTGATGAAGACGCT	2667
Db	159	ACTTTGTTATCCCTCCAGCAAGAAATCCTGATGACATTGATCTTACACTACTCTTACTCT	100
OY	2668	GCTCCTGTGCTATA 2683	
Db	99	ACTCCTACTCTGATA 84	

```

RESULT 13
US-09-385-982-27
; Sequence 27, Application US/09385982
; Patent No. 6262334
; GENERAL INFORMATION:
; APPLICANT: ENDEGE, WILSON O., ET AL.
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
; TITLE OF INVENTION: PRODUCTS: II
; FILE REFERENCE: CCDNA-260XX
; CURRENT APPLICATION NUMBER: US/09/385,982
; CURRENT FILING DATE: 1999-08-30
; EARLIER APPLICATION NUMBER: 09/328,111
; EARLIER FILING DATE: 1999-06-08
; EARLIER APPLICATION NUMBER: 60/117,393
; EARLIER FILING DATE: 1999-01-27
; EARLIER APPLICATION NUMBER: 60/098,639
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 544
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 27
; LENGTH: 611
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(611)
; OTHER INFORMATION: n = A,T,C or G
US-09-385-982-27

```

Query Match	Best Local Similarity	Matches	300; Conservative	6.1%;	Score 183.4;	DB 4;	Length 611;
				68.0%;	Pred. No. 1.2e-44;		
				0;	Mismatches 136;	Indels 5;	Gaps 3;
QY 1882	CCATTCTCAGGGCCAGTGTACAGGCCCTGATTTGAATCACTGAAT	GGAAAAACAGTTAC	1940				
Db 2	CCGTCTTTGGAGCAATGTGACTGTTTCATTTGAATCAAGAAATGGGACATCAAGAAAT	61					
QY 1941	CTTGGAACACTGATGATATGAGACAGGTGCTGATGCTACTAAAGAAATGAGCGTGTACTTC	2000					
Db 62	TTTGGACCTTTTGGATATGATGGTGCAGGCGCTGATTTCTTCAAAATATGATGAGCTTACTTC	121					
QY 2001	AAGTATTTTCAACACTTATGACACGAATGCTAATACAGTGTAAAGTGGCGGCTCTGGG	2060					
Db 122	CAGGTATTTTACACATATATACAGAAATATGGCAGATATAGCTTAAAGTTGGGCTCATGG	181					
QY 2061	AGGAGTTAAGCGACCCAGCAGGAGAGATGATACCCACAGCAAGTGTGAGCACTGTATCAATAC	2120					

```

Db 182 AGAGCAAACTGCGAGGCTAAATTCAGGCTCCAGTAGAGCGCGCTACATACC 241
OY 2121 TGGCTGGATTGGAATGATGAATACATGGAATCCACCAAGACCTGGAATTAATAGGA 2180
Db 242 AAGCTGGGAGTGAAGGGGAAATGGAACCAACCGCAACACCTGGAATTTGAT--GA 298
OY 2181 TGATGTTCAACAAAGCAAGTGTGTTTCAGCAGAACATCTCGGAGGCTCATTTGTGSC 2240
Db 299 GGATACCTGAGACCTTGAGGATTTTCAGCGAAGACATCCGAGTGCATTTGTGCT 358
OY 2241 TTC-TGATGTCCTCCAAATGCTCCATACCTGATCTCTCCACCTGGCCAAATCACCGACC 2299
Db 359 ATCAACAAAGTCCCAACCTTCTTGCTGACCAATACCCCAAGTCAATCAATCAGACGACC 418
OY 2300 TGAAGCGGGAATTCACGGGG 2320
Db 419 TTGATGCCACAGTCATTAAG 439

```

## RESULT 14

```

US-09-385-982-33
; Sequence 33, Application US/09385982
; Patent No. 6262334
; GENERAL INFORMATION:
; APPLICANT: ENDEGE, WILSON O., ET AL.
; TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
; TITLE OF INVENTION: PRODUCTS: II
; FILE REFERENCE: CCDNA-260XX
; CURRENT APPLICATION NUMBER: US/09/385,982
; EARLIER FILING DATE: 1999-08-30
; EARLIER APPLICATION NUMBER: 09/328,111
; EARLIER FILING DATE: 1999-06-08
; EARLIER APPLICATION NUMBER: 60/117,393
; EARLIER FILING DATE: 1999-01-27
; EARLIER APPLICATION NUMBER: 60/098,639
; EARLIER FILING DATE: 1998-08-31
; NUMBER OF SEQ ID NOS: 544
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 33
; LENGTH: 742
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(742)
; OTHER INFORMATION: n = A,T,C or G
09-385-982-33

```

Query Match 5.7%; Score 168.6; DB 4; Length 742;

Best Local Similarity 69.9%; Pred. No. 3.3e-40;

Matches 285; Conservative 0; Mismatches 115; Indels 8; Gaps 4;

```

OY 2114 ACATACCTGGCTGATGATGAATGAATACAAATGAAATCCACCAAGACCTGAATTA 2173
Db 1 ACATACCAAGGCTGGGTAGTGAAGGGAATGGAAGCAACCGCAAGACCTGAATTTG 60
OY 2174 ATAAGATGATGTTCAACCAAGCAAGTGTGTTTCAGCAGAAATCTCGGAGGCTCAT 2233
Db 61 ATGAGAGTATC--TCAGACCACTTGAGGATTTCAAGCCGAACAGATCCGAGGTGCAT 117
OY 2234 TTGTGGCTTCGATGATCCCAATGCTCCATACCTGATCTCTCCACCTGGCCAAATTA 2293
Db 118 TTGTGTTATCACAAAGTCCCAAGCTTCCCTGCTGACCAATACCCACCAAGTCAATTA 177
OY 2294 CCGACCTGAAGGCGGAATTCACGGGGGAGTCTCATTAATTCGACTTGGACAGCTCTG 2353
Db 178 CAGACTTGTGATCCCAAGTTCATGAG--ATAAGATTATTTCTACATGAGACGACGAG 234
OY 2354 GGGATGATTATGACATGGAAGCTCACAAATATATCATTTGGAATTAAGTACAGTATTC 2413
Db 235 GAGATTAATTTGATGTTGAAAAAGTTCAACGTTATATCATTAAGATTAAGTCAAGTATTC 294

```

```

OY 2414 TTGATCTCAGACAAAGTTCAATGAATCTTTCAAGTGAATACCTACTGCTCATCCAA 2473
Db 295 TTGATCTAAGACAGAGTTTGTGATGATGCTTCAAGTAAAT-CTACGTATCT-GCACCAA 352
OY 2474 AAGAAACCACTCTGAGGAAGTCTTTTGTGTTTAAACGAAATTA 2521
Db 353 AGGAGGCCAACTTCAAGGAAGAACTTTGATTTAACCAAAAATATTTTA 400

```

## RESULT 15

```

US-09-193-562D-14
; Sequence 14, Application US/09193562D
; Patent No. 6309857
; GENERAL INFORMATION:
; APPLICANT: Pauli, Benedicht U.
; TITLE OF INVENTION: Nucleotide Sequences Encoding Mammalian Calcium
; TITLE OF INVENTION: Activated Chloride Channel Adhesion Molecules
; FILE REFERENCE: 18617.0052
; CURRENT APPLICATION NUMBER: US/09/193,562D
; PRIOR FILING DATE: 1998-11-17
; PRIOR APPLICATION NUMBER: US/60/065,922
; NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 14
; LENGTH: 335
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide probe
US-09-193-562D-14

```

Query Match 3.2%; Score 95.4; DB 4; Length 335;

Best Local Similarity 61.4%; Pred. No. 1.2e-18;

Matches 153; Conservative 0; Mismatches 96; Indels 0; Gaps 0;

```

OY 2381 ACAAGTATATCATTCGATTAAGTACAGATATTTGATCTCAGACAAAGTTCAATGAAT 2440
Db 3 ACAGCTACTATTAAAGTAATTAAGTAAAGTTTATGATGATGATGATGATGATGATGATG 62
OY 2441 CTCTTCAAGTGAATCTACTGCTCTCATCTCCCAAGGAAGCCACACTCTGAGAGTCTTT 2500
Db 63 CGACTTTAGTGAATCTCTTAATCTTAATCTTAAGAGGCGGATCAAAAGAAATTTTGG 122
OY 2501 TGTTAACCAAGAAACATTAATCTTTGAAATGAGCAGAGATCTTCAATGCTATTCAGG 2560
Db 123 AATTTAAGCCAGACATTTTGAAGTAGAATAAGGACCAAAATTTATATTCAGTCCAAAG 182
OY 2561 CTGTTGATAGGTCGATCTGAATTCAGAAATATCCAACTTGCACAGAGTATCTTTGTTTA 2620
Db 183 CCATCAAGGAAGCCAAATCTCATCTCAGAGGTTTCTCACATTTGACACGAATCAATTA 242
OY 2621 TTCTCTCAC 2629
Db 243 TTCTCTTAC 251

```

Search completed: October 17, 2002, 11:16:38

Job time : 131.486 secs

This Page Blank (uspto)